GENERAL NOTES

- BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- . EXACT LOCATIONS AND MOUNTING HEIGHTS OF PLUMBING FIXTURES SHALL BE OBTAINED FROM THE ARCHITECTURAL DRAWINGS.
- SEE ARCHITECTURAL DRAWINGS FOR HANDICAP FIXTURE LOCATIONS AND MOUNTING HEIGHTS. INSULATE ALL EXPOSED WATER AND DRAIN PIPING BELOW LAVATORIES AND SINKS WITH TRUEBRO NO. 103 E-Z INSULATION KIT AND OFFSET P-TRAP TO WALL. ALL WATER CLOSET FLUSHING LEVERS SHALL BE TO THE WIDE
- SIDE OF THE STALL. TRAPS FOR ALL SINKS SHALL TRAP STRAIGHT BACK TO WALL WITH ALL REQUIRED
- PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID INTERFERENCE WITH ELECTRICAL AND MECHANICAL EQUIPMENT AND STRUCTURAL FRAMING.

OFFSETS HAPPENING WITHIN THE WALL.

- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING ACCESS PANELS WITH THE ARCHITECTURAL REFLECTED CEILING PLAN AND THE ELECTR. LIGHTING LAYOUT.
- CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONT'R SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC., AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
- VALVES, UNIONS, ETC. TO BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
- WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADOPTED AND AMENDED BY THE INSPECTING AUTHORITY. NOTHING IN THESE DRAWINGS IS TO BE CONSTRUED TO PERMIT WORK
- BEFORE FABRICATION OR INSTALLATION THIS CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL EQUIPMENT PROVIDED UNDER ANOTHER SECTION OF SPECIFICATIONS. EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED IN FIELD.

NOT CONFORMING TO THESE CODES OR OTHERS APPLICABLE TO THIS PROJECT:

- 11. WASTE AND VENT PIPING SHALL SLOPE AT 2% UNLESS OTHERWISE INDICATED.
- 12. VALVES, TRAP PRIMER, WATER HAMMER ARRESTERS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED BEHIND AN ACCESS PANEL.

- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS DAMAGED BY HIS OPERATIONS.
- 15. EXISTING PIPING DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH MATERIALS TO MATCH EXISTING BY THE CONTRACTOR.
- 16. EXISTING PIPING, FIXTURES AND EQUIPMENT THAT IS REMOVED SHALL BE DISPOSED OF AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- 19. PIPING THROUGH FIRE RATED WALLS SHALL BE PER U.L. FIRE RESISTANCE
- SYSTEM NO. WL1001. SEE ARCHITECTURAL PLANS FOR ALL LOCATIONS. 21. ANCHORAGE DETAILS FOR EQUIPMENT WHICH ARE NOT APPROVED DURING PLAN REVIEW ARE SUBJECT TO APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND STRUCTURAL ENGINEER PRIOR TO INSTALLATION AND INSPECTION BY THE
- 22. HOT WATER PIPING SHALL BE INSULATED IN ACCORDANCE WITH SECTION 123, TABLE 1-G OF THE TITLE 24 REGULATIONS.

PROJECT INSPECTOR.

- ITEMS NOT SPECIFIED OR SHOWN IN THE DRAWINGS OR SPECIFICATIONS BUT NECESSARY FOR THE COMPLETE CODE APPROVED INSTALLATION OR FOR COMPLETE OPERATION OF THE SYSTEM/INSTALLATION SHALL BE PROVIDED AS REQUIRED AT NO ADDED COST TO THE OWNER.
- 25. PIPE SIZES SHALL BE THE SAME AS THE UPSTREAM PIPE SIZES

UNLESS OTHERWISE INDICATED ON PLAN.

- 26. UNLESS SPECIFIED ON STRUCTURAL DRAWINGS, ANY ALTERATION OR MODIFICATIONS A STRUCTURAL ELEMENTS BY CUTTING, DRILLING, BORING, BRACING, WELDING ETC. SHALL HAVE WRITTEN APPROVAL STRUCTURAL ENGINEER OR RECORD AND DSA PRIOR START WORK.
- 27. CLEANOUTS SHALL BE INSTALLED AS PER SECTION 707.0 AND 719.0 OF THE
- PLUMBING CODE.
- 28. EACH PLUMBING VENT SHALL TERMINATE NOT LESS THAN TEN FEET FROM OR AT LEAST THREE FEET ABOVE ANY WINDOW, DOOR, OPENING, AIR INTAKE, OR VENT SHAFT.
- 29. WATER CLOSET BOWLS FOR PUBLIC USE SHALL BE OF THE ELONGATED TYPE.
- 30. PROVIDE TRAP PRIMERS AT FLOOR DRAINS AND SINKS TO MAINTAIN WATER SEALS. 31. POTABLE WATER SYSTEMS ON THIS PROJECT SHALL BE DISINFECTED PRIOR TO USE
- ACCORDING TO THE METHOD SET IN SECTION 609.9 OF THE PLUMBING CODE. 32. PLUMBING DRAWINGS ARE DIAGRAMMATIC. THE LOCATION AND ELEVATION OF ALL PLUMBING PIPING IS APPROXIMATE AND SHALL BE VERIFIED AND COORDINATED WITH ALL OTHER TRADES, STRUCTURAL CONDITIONS, AND BUILDING CONSTRUCTION PRIOR TO START INSTALLATION.

PLAN CHECK NOTES

- APPLIANCE AND PLUMBING VENTS AND THE DISCHARGE OUTLET OF EXHAUST FANS SHALL BE AT LEAST TEN (10) FEET IN A HORIZONTAL DIRECTION, OR THREE (3) FEET ABOVE THE OUTSIDE-AIR INTAKES FOR THE HVAC
- CLEANOUTS FOR HORIZONTAL BUILDING STORM DRAINS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 719 OF THE CALIFORNIA PLUMBING CODE
- EACH VENT SHALL RISE VERTICALLY TO A POINT OF NOT LESS THAN SIX (6) INCHES IN HEIGHT ABOVE THE FLOOD LEVEL RIM OF THE FIXTURE BEFORE BEING CONNECTED TO ANY OTHER VENT.
- PLUMBING FIXTURES, EQUIPMENT AND COMPONENT SHALL BE APPROVED AND COMPLY WITH AB1953.
- THE INSTALLATION OF ABS/PVC SHALL COMPLY WITH THE 2016 C.P.C. 604.1.1.

PIPE MATERIAL SCHEDULE

SERVICE	LOCATION	MATERIAL
DOMESTIC	COLD WATER	- PIPING SHALL BE TYPE 'L' COPPER ASTM B88 WITH WROUGHT COPPER SWEAT FITTINGS ANSI B16.22.DOMESTIC WATER.
WATER	HOT WATER	- PIPING SHALL BE TYPE 'L' COPPER ASTM B88 WITH WROUGHT COPPER SWEAT FITTINGS ANSI B16.22.DOMESTIC WATER PROVIDE INSULATION FOR ALL HOT WATER PIPES.
SANITARY	ABOVE FLOOR	NO HUB CAST IRON PIPE AND FITTINGS, ASPHALTUM COATED, ASTM A-888 OR ASTM A-74 WITH HUSKY SD-4000 OR MISSION HEAVY DUTY STAINLESS STEEL FOUR-BAND COUPLINGS. ABS OR PVC SCH. 80 (CITY AND OWNER APPROVAL REQUIRED)
WASTE AND VENT PIPING	BELOW GRADE	NO HUB CAST IRON PIPE AND FITTINGS, ASPHALTUM COATED, ASTM A-888 OR ASTM A-74 WITH HUSKY SD-4000 OR MISSION HEAVY DUTY STAINLESS STEEL FOUR-BAND COUPLINGS. ALTERNATE BELOW GRADE: ABS OR PVC SCH. 80 (CITY AND OWNER APPROVAL REQUIRED)

CALGREEN MANDATORY MEASURES

FIXTURE FI	LOW RATES
FIXTURE TYPE	MAXIMUM FLOW RATE
SHOWERHEADS (LOW FLOW)	2 GPM @ 60 PSI
LAVATORY FAUCETS NONRESIDENTIAL	0.4 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
WASH FOUNTAINS	1.8 [RIM SPACE (IN.) / 20 GPM @ 60 PSI]
METERING FAUCETS	0.2 GALLONS / CYCLE
	1

EIVTLIDE EL OW DATES

METERING FAUCETS	0.2 GALLONS / CYCLE
METERING FAUCETS FOR WASH FOUNTAINS	0.20 [RIM SPACE (IN.) / 20 GPM @ 60 PSI]
GRAVITY TANK TYPE WATER CLOSETS	1.28 GALLONS / FLUSH (1)
FLUSHOMETER TANK WATER CLOSETS	1.28 GALLONS / FLUSH (1)
FLUSHOMETER VALVE WATER CLOSETS	1.28 GALLONS / FLUSH (1)
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.28 GALLONS / FLUSH (1)

ig) INCLUDES SINGLE AND DUAL FLUSH WATER CLOSETS WITH AN EFFECTIVE FLUSH OF 1.28 GALLONS OR LESS: SINGLE FLUSH TOILET - THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.28 GALLONS (4.8 LITERS). THE EFFECTIVE FLUSH VOLUME IS THE AVERAGE FLUSH VOLUME WHEN TESTED IN ACCORDANCE WITH ASME A 112.19.233.2. DUAL FLUSH TOILETS - THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1,28 GALLONS (4.8 LITERS). THE EFFECTIVE FLUSH VOLUME IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH. FLUSH VOLUMES WILL BE TESTED IN ACCORDANCE WITH ASME A 112.19.2 ASME A 112.19.14.

0.5 GALLONS / FLUSH

NO LEAD REQUIREMENT

URINALS

ALL MATERIALS, DEVICES, ETC...INSTALLED IN THE DOMESTIC HOT AND COLD WATER SYSTEMS SHALL COMPLY VITH CALIFORNIA HEALTH AN SAFETY CODE SECTION 116875- AB1953

BEL BLDG CLG CFH CW DWG FLR GPM QTY SD/RD RW SOV SQFT TEMP TYP

ABBREVIATIONS

ABBREV.

DESCRIPTION	SYMBOL	DESCRIPTION
		WASTE PIPING (BELOW)
ABOVE ABOVE FINISHED FLOOR		WASTE PIPING (ABOVE)
AVERAGE		,
BELOW		VENT PIPING
BUILDING		
CONDENSATE DRAIN		COLD WATER PIPING
CEILING		
CUBIC FEET PER HOUR		HOT WATER PIPING
COLD WATER		THOT WATERT II III II
DOWN		LIOT WATER RIDING RETURN
DRAWING		HOT WATER PIPING RETURN
FROM ABOVE	400	
FROM BELOW		RISER
FLOOR		
FEET	0——	ELBOW UP
GALLONS PER MINUTE	_	
HOT WATER RETURN	C	ELBOW DOWN
HOT WATER RETURN	_	
INVERT ELEVATION	- 	TEE PIPING DOWN
INCHES POUNDS		
QUANTITY		BREAKLINE
STORM DRAIN/ROOF DRAIN	1	
RECLAIMED WATER	Φ	BALL VALVE
OVERFLOW DRAIN		
SHUT-OFF VALVE	Å	PRESSURE REDUCING VALVE
SQUARE FEET		
SANITARY SEWER		PRESSURE RELIEF VALVE
TEMPERATURE		
TYPICAL	ı ı	UNION
WASTE/VENT		
WASTE		CLEAN OUT
	φ	FLOOR CLEAN OUT
	VALVE_NO	CIRCUIT SOLVER
	X	DETAIL CALL OUT
AND EQUIPMENT SCHEDULE		1

PLUMBING LEGEND

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

HAMMER ARRESTER

ROUGH-IN CONNECTIONS

		10001111000111E0110110			0110110		1
ITEM	FIXTURE	SOIL/ WASTE	VENT	HOT	COLD	GAS	DESCRIPTION
WC-1 (E)	(E)WATER CLOSET	4"	2"		1"		REFURBISH EXISTING FIXTURE, FLUSH VALVE AND TOILET SEAT AND LEAVE IN OPTIMUM WORKING ORDER.
WC-2(E)	(E)WATER CLOSET (ADA)	4"	2"		1"		REFURBISH EXISTING FIXTURE, FLUSH VALVE AND TOILET SEAT AND LEAVE IN OPTIMUM WORKING ORDER.
<u>U-1</u>	URINAL 0.125 GPF	2"	1 1/2"		3/4"		AMERICAN STANDARD NO. 6590.001, VITREOUS CHINA WALL HUNG URINAL, COMPLETE WITH SLOAN "ROYAL" NO. 186-0.125 SFSM, ONE PIECE WALL HANGER BRACKET WITH ANCHORS. CONNECT TO EXISTING UTILITIES.
<u>U-2</u>	URINAL (ADA) 0.125 GPF	2"	1 1/2"		3/4"		SAME AS UR-1 EXCEPT MOUNTED AT ACCESSIBLE HEIGHT (SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT AND EXACT FIXTURE LOCATION.)
<u>L-1</u>	LAVATORY	2"	1 1/2"	1/2"	1/2"		AMERICAN STANDARD NO. 0495.221 "OVALYN", UNDERCOUNTER MOUNTED SINK. COMPLETE WITH BRADLEY POINT OF USE MIXING VALVE MODEL S59-4000. CHICAGO FAUCET MODEL NO. 844-665PSHABCP WITH GRID DRAIN, BRASS CRAFT FLEXIBLE SUPPLIES, 1/4 TURN STOP. L.A. PATTEN "P" TRAP. TRU BRO 103-EZ PIPE PROTECTION.
<u>L-2</u>	LAVATORY (ADA)	2"	1 1/2"	1/2"	1/2"		SAME AS L-1 EXCEPT FOR HANDICAP ACCESS (SEE ARCHITECTURAL PLANS FOR DESIGNATED ACCESSIBLE FIXTURE).
<u>L-3</u>	LAVATORY (ADA)	2"	1 1/2"	1/2"	1/2"		AMERICAN STANDARD "LUCERNE" LAVATORY MODEL 0355.012 WITH CHICAGO FAUCET MODEL NO. 844-665PSHABCP WITH GRID DRAIN, BRASS CRAFT FLEXIBLE SUPPLIES, 1/4 TURN STOP. L.A. PATTEN "P" TRAP. TRU-BRO PIPE 100-EZ COVERS. BRADLEY POINT OF USE MIXING VALVE MODEL S59-4000.
EWC-1	ELECTRIC WATER COOLER	2"	1 1/2"		1/2"		ELKAY EZH2O MODEL NO. LZWS-LRPBM28K. WALL MOUNTED, STAINLESS STEEL, LEAD FREE, WASTE STRAINER, BOTTOM PLATE, AND BOTTLE FILLER. 115V, 1Ø, 1/4HP REFRIGERATOR.
<u>HB-1</u>	HOSE BIBB				3/4"		ACORN MODEL 8121 WITH INTEGRAL VACUUM BREAKER
	WATER						

-- -- JR SMITH SERIES 5000, SIZE AND INSTALL PER PDI REQUIREMENTS

CALIFORNIA GREEN CODE NOTES

PLUMBING SHEET INDEX

SHEET NUMBER

P-001

P-401

ALL PLUMBING FIXTURES ON PLUMBING FIXTURE AND EQUIPMENT SCHEDULE MEET THE REQUIREMENTS OF CALIFORNIA GREEN CODE 2016.

SHEET TITLE

WATER REDUCTION 5.303.2

WATER CONSERVING PLUMBING FIXTURES AND FITTINGS 5.303.3

PLUMBING GENERAL NOTES

PLUMBING ENLARGED PLAN

WATER CLOSETS 5.303.3.1

URINALS 5.303.3.2

WASTEWATER REDUCTION 5.303.4

STANDARDS FOR PLUMBING FIXTURES AND FITTINGS 5.303.6

CPC CHAPTER 14

APPLICABLE CODES

- 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA ELECTRICAL CODE 2016 CALIFORNIA FIRE CODE
- 2016 CALIFORNIA ENERGY CODE (TITLE 24)
- 2016 CALIFORNIA PLUMBING CODE WITH ALL APPLICABLE AMENDMENTS
- 2016 CALIFORNIA GREEN CODE WITH ALL APPLICABLE AMENDMENTS 2016 CALIFORNIA GREEN BUILDING CODE

GREEN BUILDING STANDARD NOTES

- MINIMUM OF 50% OF NON HAZARDOUS CONSTRUCTION WASTE TO BE RECYCLE. CGC 5.713.8.1. TESTING AND ADJUSTING OF NEW SYSTEMS SHALL COMPLY AS OUTLINED IN CGC SECTION
- OPERATIONS AND MAINTENANCE SCHEDULE (O&M) AS LISTED IN CGC SECTION 5.713.10.4.5 SHALL BE DELIVERED TO THE BUILDING OWNER OR REPRESENTATIVE AND THE FACILITIES OPERATOR.
- DURING CONSTRUCTION, ENDS OF DUCT OPENING ARE TO BE SEALED, AND MECHANICAL
- EQUIPMENT IS TO BE COVERED. CGC 5.714.4.3. VOC'S MUST COMPLY WITH THE LIMITATIONS LISTED IN SECTION 5.504.4 AND TABLES 4.504.1,
- 5.504.4.1, 5.504.4.2, 5.504.4.3 AND 5.504.4.5 FOR: ADHESIVES, SEALANTS, PAINTS, AND COATINGS, CARPET AND COMPOSITION WOOD PRODUCTS. CGC 5.714.4.4.

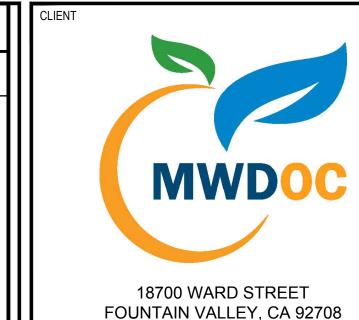
ADA REQUIREMENTS

1. WATER CLOSETS:

A. THE HEIGHT OF ACCESSIBLE WATER CLOSETS SHALL BE A MINIMUM OF 17" (431.8 mm) AND A MAXIMUM OF 19" (482.6 mm) MEASURED TO THE TOP OF TOILET SEAT. FLUSH CONTROLS SHALL BE OPERABLE, BE AN OSCILLATING HANDLE WITH A MAXIMUM OPERATING FORCE OF 3 LBS. (.67 N) OR BY A REMOTE LOW VOLTAGE BUTTON. THE HANDLE OF THE BUTTON SHALL BE LOCATED SO IT IS OPERABLE WITHOUT REQUIRING EXCESSIVE BODY MOVEMENT. (LOCATE ON WIDE SIDE OF WATER CLOSET).

2. LAVATORIES:

- LAVATORIES SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 29" (736.6 mm) FROM THE FLOOR TO THE BOTTOM OF THE APRON WITH KNEE CLEARANCE UNDER THE FRONT LIP EXTENDING A MINIMUM OF 30" (762 mm) IN WIDTH WITH 8" (203.2 mm) MINIMUM OF DEPTH AT THE TOP. TOE CLEARANCE SHALL BE THE SAME WIDTH AND SHALL BE A MINIMUM OF 9" (228.6 mm) HIGH FROM THE FLOOR AND A MINIMUM OF 17" (431.8 mm) DEEP FROM THE FRONT OF THE LAVATORY.
- HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
- C. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS. (22.2 N). LEVER-OPERATED PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.



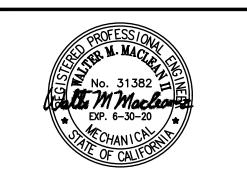
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY -ADMINISTRATIVE BUILDING

SEISMIC RETROFIT, ADA COMPLIANCE AND TENANT IMPROVEMENT

NGINEER/ARCHITECT



1 PETERS CANYON ROAD, SUITE 130 IRVINE, CA 92606 TEL: 949-387-8500, FAX: 949-387-0800



REV. DESCRIPTION

90% CD - MWDOC REVIEW

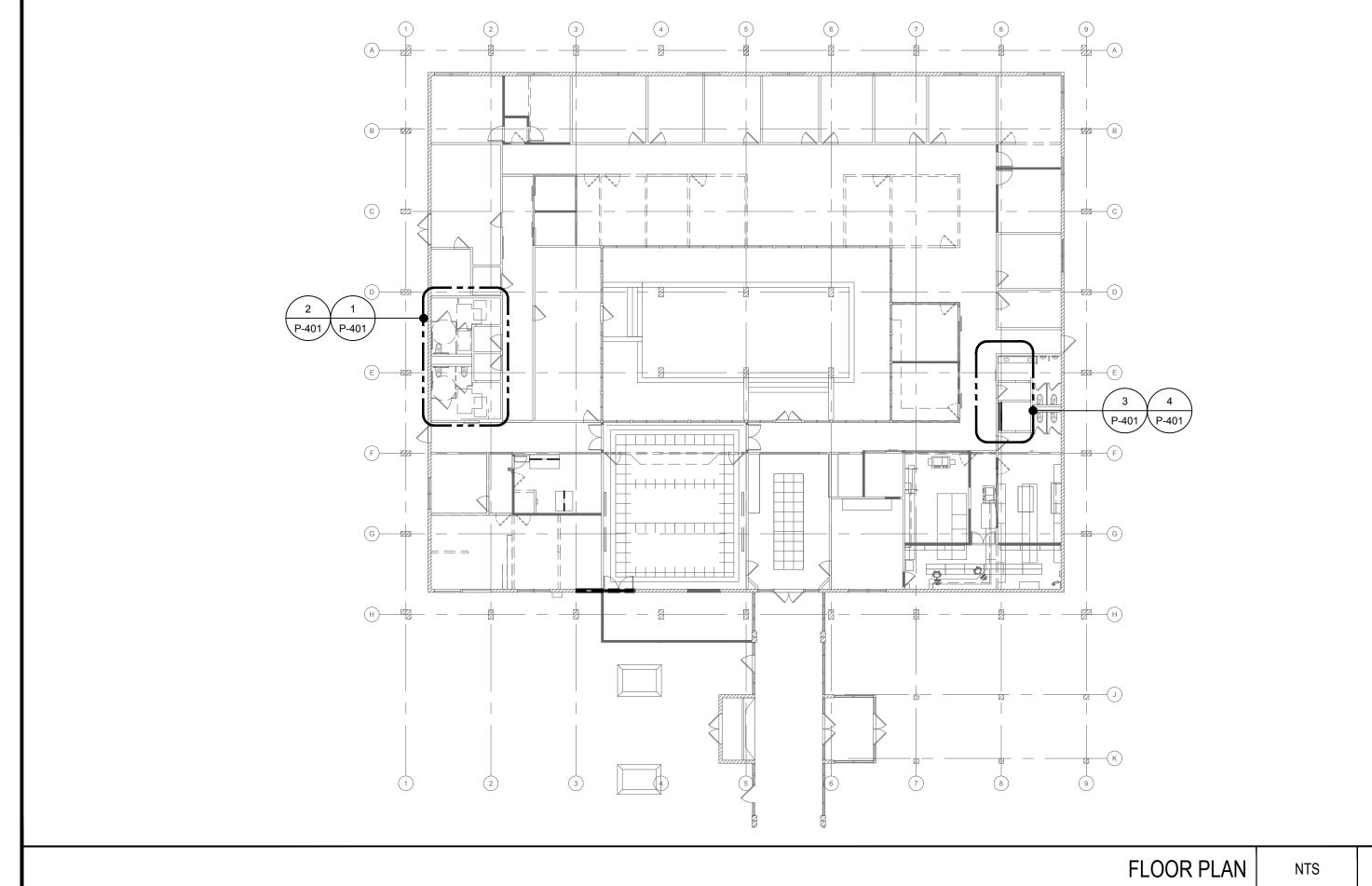
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PLUMBING GENERAL NOTES

SHEET NUMBER

P-001



SHEET NO.

