

(TOILET ROOM ENLARGEMENT)
2 PART. FLOOR PLAN - PLUMBING
 SCALE: 3/16"=1'-0"

NOTE: THIS IS AN EXISTING FACILITY WHICH HAS EXISTING SANITARY AND WATER DISTRIBUTION SYSTEMS. ALTERATIONS TO EXISTING WORK BEING OF SUCH NATURE THAT ALL FACETS OF THE WORK ARE IMPOSSIBLE TO DETAIL AND SPECIFY. IT IS THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE CONDITIONS AND RELATE THESE CONDITIONS TO THE SCOPE OF THE PROPOSED NEW WORK. ALL BIDS ARE EXPECTED TO ENCOMPASS THE TOTAL WORK SCOPE NEEDED TO PLACE THE COMPLETED SYSTEM IN WORKING CONDITION.

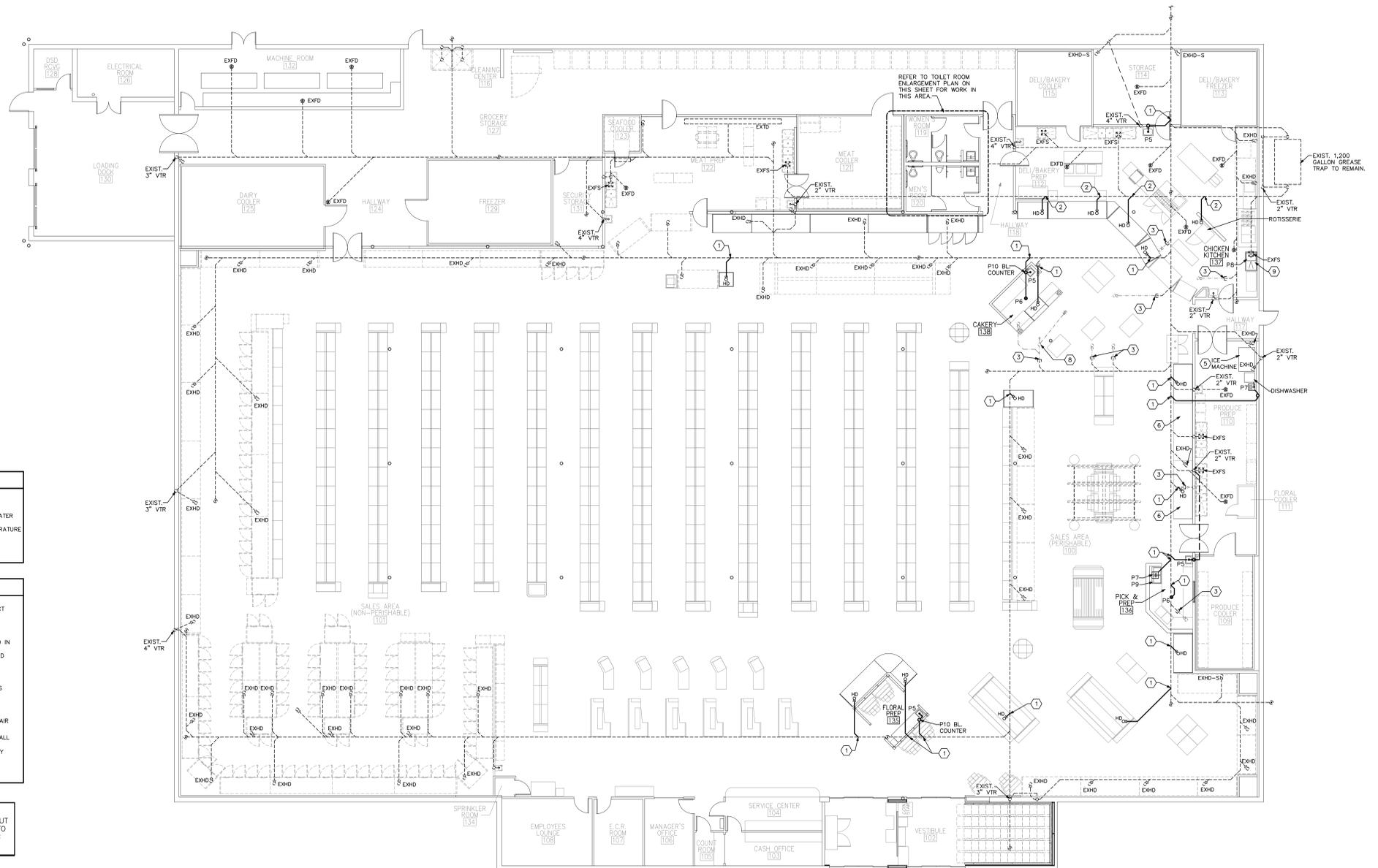
PLUMBING SYMBOLS LEGEND

●	FLOOR DRAIN
○	HUB DRAIN (NEW)
○	HUB DRAIN (EXIST. TO REMAIN)
○	COOLER/FREEZER COND. DRAIN
○	FLOOR DRAIN (EXIST. TO REMAIN)
○	FLOOR SINK (EXIST. TO REMAIN)
○	TRENCH DRAIN (EXIST. TO REMAIN)
○	CLEANOUT
○	RELIEF VALVE
○	AIR CHAMBER
○	UNION
○	SOIL OR WASTE LINE
○	SANITARY VENT LINE
○	DOMESTIC COLD WATER
○	DOMESTIC HOT WATER
○	DOMESTIC WATER RECIRCULATION
○	PRESSURE & TEMP. RELIEF LINE
○	CONDENSATE DRAIN LINE
○	RAIN WATER LEADER
○	GAS LINE
○	SAFESTASTE LINE
○	FIRE PROTECTION
○	SHUT OFF VALVE
○	SAFEPAN LINE
○	FIRE SPRINKLER HEAD
○	PIPE TURN UP
○	PIPE TURN DOWN
○	P-TRAP

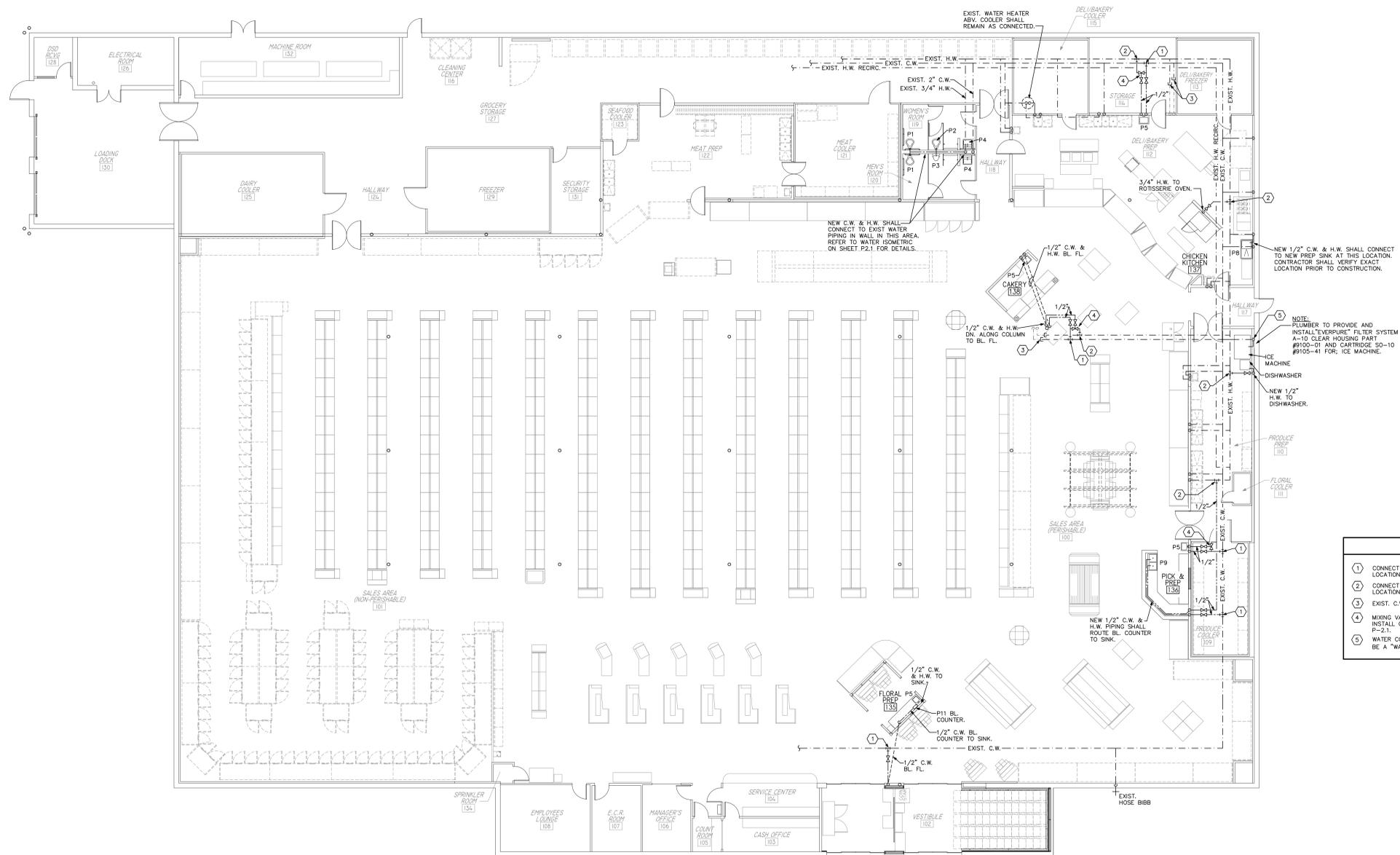
PLUMBING ABBREVIATION LEGEND			
DN.	DOWN	F.U.	FIXTURE UNITS
EXT.	EXTERIOR	H.B.	HOSE BIBBS
F.D.	FLOOR DRAIN	MFR.	MANUFACTURER
F.F.	FINISH FLOOR	S.O.V.	SHUT OFF VALVE
A.F.F.	ABOVE FINISH FLOOR	W.C.	WATER CLOSET
V.T.R.	VENT THROUGH ROOF	L.V.	LABORATORY
TYP.	TYPICAL	SK.	SINK
R.D.	ROOF DRAIN	D.W.	DISH WASHER
REV.	REVISION	E.D.F.	ELECTRIC DRINKING FOUNTAIN
O.C.	ON CENTER	UR.	URINAL
		F.I.	FIXTURE UNITS
		H.B.	HOSE BIBBS
		C.O.	CLEANOUT
		E.W.H.	ELECTRIC WATER HEATER
		JAN.SK.	JANITOR SINK
		P & T	PRESSURE & TEMPERATURE
		RWL.	RAIN WATER LEADER

- SPECIFIC PLUMBING NOTES**
- CONNECT TO EXISTING SANITARY PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - CONNECT TO EXISTING GREASE WASTE PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - EXISTING PIPING BELOW FLOOR SLAB SHALL BE CAPPED IN THIS AREA. EXISTING PIPE MUST BE CAPPED IN A MANNER THAT DOES NOT LEAVE ANY DEAD-ENDS. ANY BRANCHES LONGER THAN 2' MUST HAVE CLEANOUTS INSTALLED. CONTRACTOR SHALL REPAIR FLOOR SLAB AS REQUIRED. EXISTING PIPING BEYOND POINT OF CAP SHALL BE ABANDONED IN PLACE.
 - CONNECT TO EXISTING WASTE/VENT STACK IN WALL IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - NEW EQUIPMENT SHALL DRAIN TO EXISTING HUB DRAIN IN THIS AREA. CONTRACTOR SHALL CONNECT AS REQUIRED.
 - RELOCATED EQUIPMENT SHALL DRAIN TO EXISTING HUB DRAIN IN THIS AREA. CONTRACTOR SHALL CONNECT AS REQUIRED.
 - EXISTING VENT STACK IN THIS AREA SHALL BE REMOVED. CAP BELOW FLOOR. CONTRACTOR SHALL REPAIR EXISTING FLOOR SLAB AS REQUIRED.
 - EXISTING VENT STACK IN THIS AREA SHALL BE REMOVED AND CAPPED BELOW FLOOR. CONTRACTOR SHALL REPAIR FLOOR SLAB AS REQUIRED. EXISTING 3" VTR IN THIS SAME AREA SHALL REMAIN. CAPP ABOVE CEILING. CONNECT NEW 3" VENT LING TO EXISTING ABV. CLG. IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - NEW PREP SINK SHALL DISCHARGE INTO EXISTING FLOOR SINK AT THIS LOCATION. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY ALL CASE ROUGH-IN DIMENSIONS WITH THE CASE MANUFACTURER. CONTRACTOR SHALL LAY-OUT ALL ROUGH-INS FOR APPROVAL BY LOWES FOOD AND CASE MANUFACTURER PRIOR TO ANY WORK. DIMENSIONS SHOWN MAY OR MAY NOT BE ACCURATE FOR THE SPECIFIC CASES TO BE SUPPLIED ON THIS PROJECT.



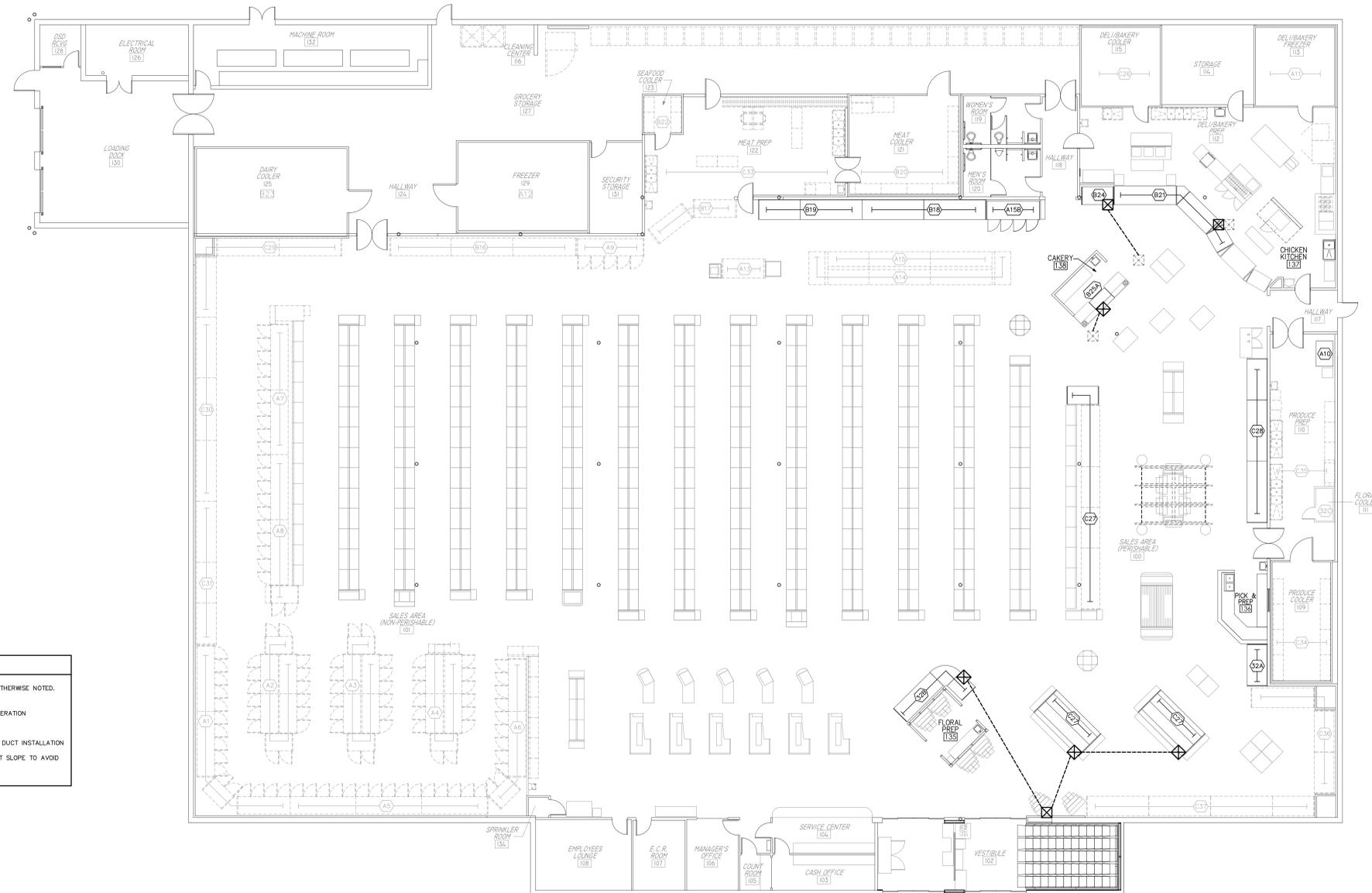
(SANITARY AND GREASE WASTE PIPING)
1 FLOOR PLAN - PLUMBING
 SCALE: 3/32"=1'-0"



- SPECIFIC PLUMBING NOTES**
- ① CONNECT TO EXISTING C.W. PIPING ABOVE CEILING IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - ② CONNECT TO EXISTING H.W. PIPING ABOVE CEILING IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
 - ③ EXIST. C.W. & H.W. PIPING SHALL BE CAPPED ABOVE CEILING AT THIS LOCATION.
 - ④ MIXING VALVES INSTALLED TO TEMPER HOT WATER. MIXING VALVE SHALL BE A "SPARCO" MODEL AM100C. INSTALL CHECK VALVES ON SUPPLY LINES TO MIXING VALVES. REFER TO MIXING VALVE DETAIL ON SHEET P-21.
 - ⑤ WATER CONNECTION TO ICE MACHINE SHALL HAVE A BACKFLOW PREVENTER. BACKFLOW PREVENTER SHALL BE A "WATTS" S02 3/8". <http://media.wattswater.com/es-sd2.pdf>

(WATER PIPING)
1 FLOOR PLAN - PLUMBING
 SCALE: 3/32"=1'-0"

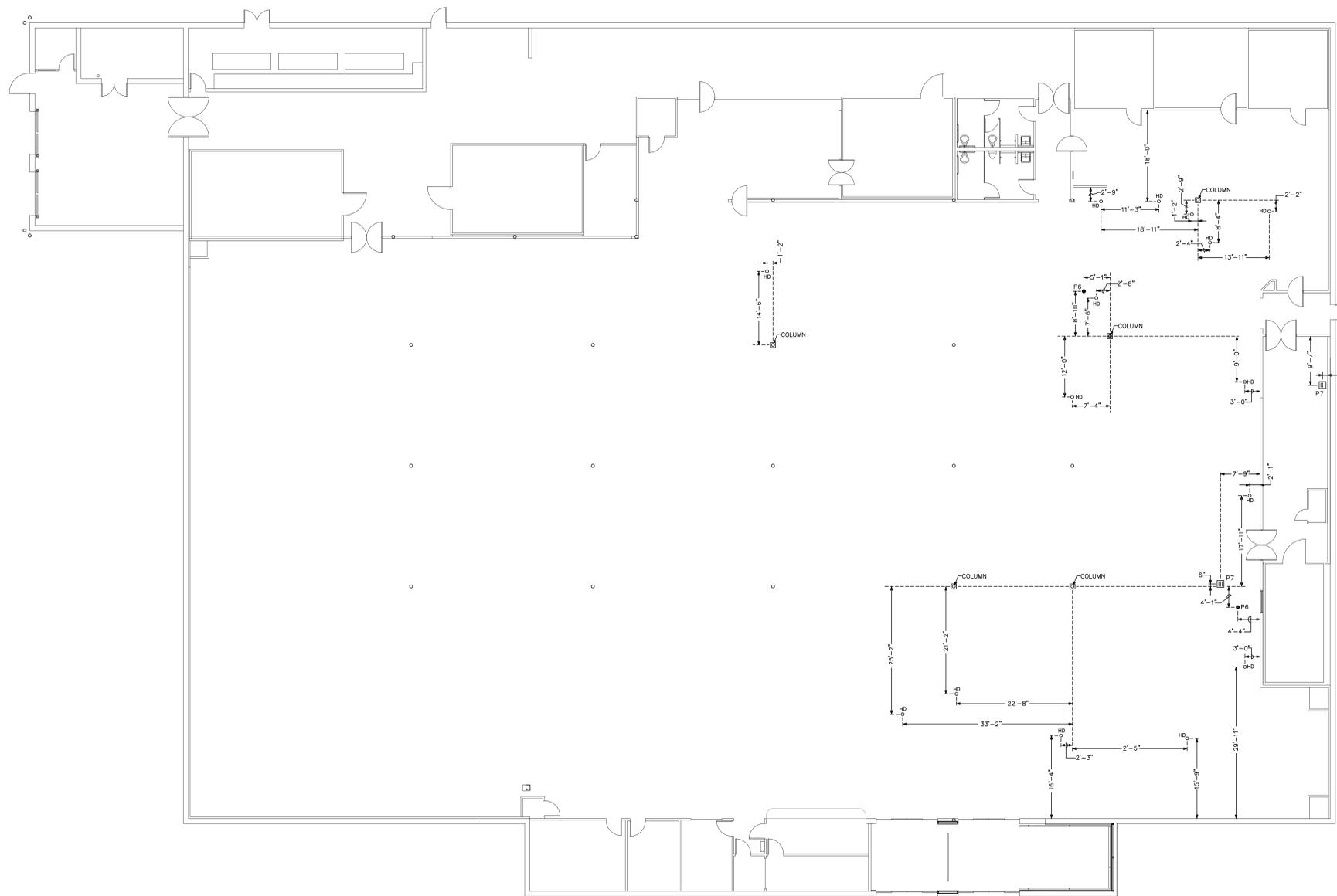
NOTE:
 NEW REFRIGERANT PIPING FOR THE FOLLOWING
 REFRIGERATION CIRCUITS: SEA, A10, A15B, B19,
 C28. SHALL BE RUN OVERHEAD UNLESS OTHERWISE
 NOTED. COORDINATE FINAL REFRIGERANT PIPE ROUTING
 AND SIZING WITH LOWE'S FOODS PRIOR TO
 CONSTRUCTION.



LEGEND	
	= EXISTING REFRIGERATION PIT
	= NEW 2'-0" X 2'-0" X 1'-6" DEEP REFRIGERATION PIT
	= (1) 6" SCHED. 40 UNDER FLOOR DUCTS FOR REFRIGERANT LINE. COORDINATE FINAL QUANTITY, SIZE AND LOCATION WITH LOWE'S FOODS PRIOR TO CONSTRUCTION.
	= (2) 6" SCHED. 40 UNDER FLOOR DUCTS FOR REFRIGERANT LINE. COORDINATE FINAL QUANTITY, SIZE AND LOCATION WITH LOWE'S FOODS PRIOR TO CONSTRUCTION.

- | REFRIGERATION NOTES | |
|---------------------|--|
| 1. | ALL UNDER FLOOR DUCT FOR REFRIGERATION LINES SHALL BE SCHEDULE 40 PVC, 6" IN DIAMETER UNLESS OTHERWISE NOTED. |
| 2. | REFRIGERATION LINES BY LOWE'S FOODS. |
| 3. | SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO REFRIGERANT PITS. |
| 4. | CONTRACTOR SHALL TAKE EXTREME CARE TO ENSURE DUCTS SLOPE FROM 2' X 2' PIT DOWN TO THE REFRIGERATION PIPING ACCESS AREA. SLOPE SHALL BE A MINIMUM OF 1/8" PER FOOT. |
| 5. | SWEEP-UP 6" PVC AT 45 DEGREE ANGLE. REFER TO DETAIL ON THIS SHEET. |
| 6. | INSTALLATION OF UNDER FLOOR DUCT IS BY PLUMBING CONTRACTOR. |
| 7. | INSTALLATION OF REFRIGERATION PITS BY ANOTHER CONTRACTOR. NOT PLUMBING CONTRACTOR. COORDINATE DUCT INSTALLATION WITH GENERAL CONTRACTOR. |
| 8. | AVOID INTERFERENCE'S WITH FOOTINGS AND COLUMNS WITH UNDERGROUND DUCT. MODIFY UNDER FLOOR DUCT SLOPE TO AVOID ROUTING IN FOOTER AS NECESSARY. |
| 9. | SEAL OPEN END OF 6" PVC TO PREVENT SAND FROM ENTERING CONDUIT IN ALL ACCESS PITS. |

1 REFRIGERATION PIT PIPING PLAN - PLUMBING
 SCALE: 3/32"=1'-0"



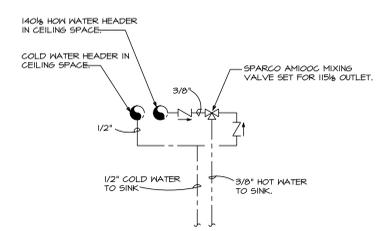
PLUMBING SYMBOLS LEGEND	
○ HD	HUB DRAIN (NEW)
● P6	FLOOR DRAIN (NEW)
■ P7	FLOOR SINK (NEW)

1 DIMENSION PLAN - PLUMBING
 SCALE: 3/32" = 1'-0"

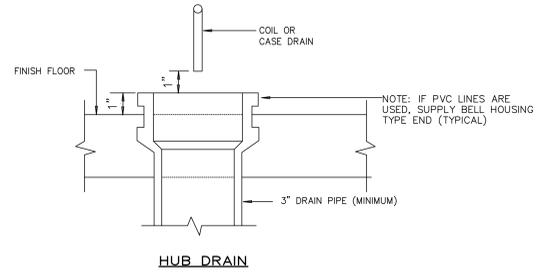
PLUMBING FIXTURE SCHEDULE									
SYM.	FIXTURE	CW	HW	DRAIN	STOPS & VALVES	MANUF.	MODEL	REMARKS	ACCEPTABLE ALTERNATIVE MANUFACTURERS, SEE NOTE 6
P-1	WATER CLOSET FLOOR MOUNT FLUSH VALVE HANDICAP	1"	-	3"	FLUSH VALVE	AMERICAN STANDARD	3451.1.28 1.28 GPF	INCLUDE SLOAN #111-1.28 SMOOTH, BATTERY OPERATED FLUSH VALVE. OLSONITE #10 WHITE OPEN FRONT SEAT WITHOUT COVER. SEE NOTES 1,2.	GRANE KOHLER, ELIER FOR FIXTURES ONLY. NO SUBSTITUTION FOR SLOAN VALVE.
P-2	WATER CLOSET FLOOR MOUNT FLUSH VALVE	1"	-	3"	FLUSH VALVE	AMERICAN STANDARD	3451.1.28 1.28 GPF	INCLUDE SLOAN #111-1.28 SMOOTH, BATTERY OPERATED FLUSH VALVE. OLSONITE #10 WHITE OPEN FRONT SEAT WITHOUT COVER. SEE NOTE 2.	
P-3	URINAL	3/4"	-	2"	FLUSH VALVE	TOTO	UT105J	INCLUDE SLOAN 186-1.0 SMOOTH, BATTERY OPERATED FLUSH VALVE. SEE NOTE 1.	
P-4	LAVATORY COUNTER HANDICAP	1/2"	1/2"	1-1/4"	1/2"x3/8" ANGLE	AMERICAN STANDARD	0621.001	PLUMBING CONTRACTOR SHALL SUPPLY SINK. INSTALL A KOHLER K-193-4 W/0.5 GPM MAX. FLOW, GRID DRAIN, BRASS/STAINLESS R19C SUPPLY VALVES W/CHROME PLATED RISER AND WALL FLANGE, 1-1/4"x1-1/4" TUBULAR P-TRAP CP. SEE NOTES 1&3.	GRANE KOHLER ELIER
P-5	HAND SINK STAINLESS STEEL	1/2"	1/2"	1-1/4"	1/2"x3/8" ANGLE	-	-	SINK AND FAUCET SUPPLIED BY LOWES FOODS. PLUMBER SHALL INCLUDE ALL EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION THAT DOES NOT COME WITH SINK. PROVIDE MIXING VALVE. REFER TO MIXING VALVE DETAIL ON THIS SHEET.	-
P-6	FLOOR DRAIN (FORMED) (NON WASHDOWN AREAS)	-	-	3"	-	MIFAB	F1000-RB-7	NICKEL BRONZE, DEEP SEAL TRAP, PROVIDE PRIMER TAP. SEE NOTE 4.	NO ALTERATIONS
P-7	FLOOR SINK	-	-	3"	-	MIFAB	FS1720-150-5	HALF TOP GRATE, 12" X 12" TOP AND SEDIMENT BUCKET.	-
P-8	1 COMP. PREP SINK STAINLESS STEEL	1/2"	1/2"	1-1/4"	1/2"x3/8" ANGLE	-	-	SINK AND FAUCET SUPPLIED BY LOWES FOODS. PLUMBER SHALL INCLUDE ALL EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION THAT DOES NOT COME WITH SINK.	-
P-9	2 COMP. PREP SINK STAINLESS STEEL	1/2"	1/2"	1-1/4"	1/2"x3/8" ANGLE	-	-	SINK AND FAUCET SUPPLIED BY LOWES FOODS. PLUMBER SHALL INCLUDE ALL EQUIPMENT REQUIRED FOR A COMPLETE INSTALLATION THAT DOES NOT COME WITH SINK.	-
P-10	STUDDOR VENT	-	-	2"	-	IPS CORP.	MINI-VENT	* http://www.ipscorp.com/plumbing/studor/minivent	-
P-11	ELECTRIC WATER HEATER	1/2"	1/2"	-	-	EEMAX	EX4208 N4X	4.1 KW TANKLESS WATER HEATER @ 208V/1ϕ, 20 AMPS. http://goo.gl/34A1W0	CHRONOMITE STEBEL ELTRON

NOTES:
 1. MATERIAL AND INSTALLATION SHALL BE PER STATE HANDICAP CODE REQUIREMENTS AND ADA REQUIREMENTS.
 2. TOILETS SHALL FLUSH ON A MAXIMUM OF 1.28 GALLONS PER FLUSH.
 3. LAVATORIES SHALL HAVE 0.5 GPM FLOW ADJUSTERS.
 4. INDICATED FLOOR DRAINS SHALL BE PRIMED WITH 1/2" COPPER LINE FROM NEARBY CLEAR WATER FIXTURE (LAVATORY). TAP CLEAR WATER FIXTURE TAIL PIECE WITH WATER SAVING TRAP PRIMER AND ROUTE COPPER SUPPLY LINE UNDER SLAB TO DRAIN PRIMER CONNECTION. WATER SERVER TRAP PRIMER SHALL BE ACCESSIBLE AND CODE APPROVED. IF A CLEAR WATER FIXTURE SUCH AS A LAVATORY IS NOT AVAILABLE, TAP NEARBY COLD WATER LINE AND ROUTE 1/2" COPPER LINE THROUGH PRIMER VALVE CODE APPROVED FOR WASTE/WATER CROSS CONNECTION. VALVE SHALL BE ACCESSIBLE AND INSTALLED ON WALL ABOVE FLOOR SINK OF CLOSEST PREP SINK.
 5. INSTALL CHECK VALVE ON COLD AND HOT WATER SUPPLY LINES SERVING MOP SINK AND CLEANING CENTER.
 6. FIXTURES BY ALTERNATE MANUFACTURERS MUST BE APPROVED BY LOWES FOODS ENGINEERING PRIOR TO PURCHASE.

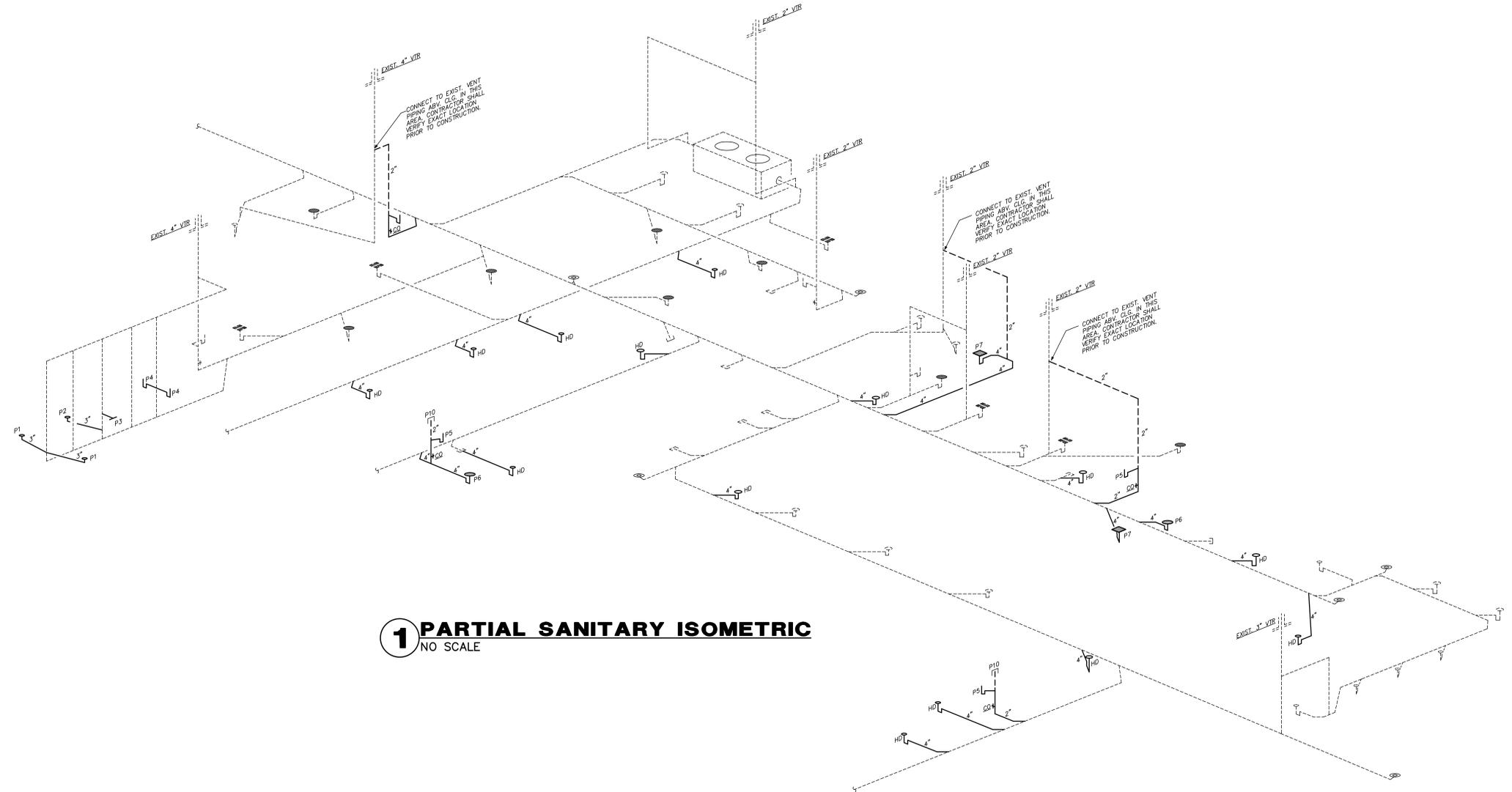
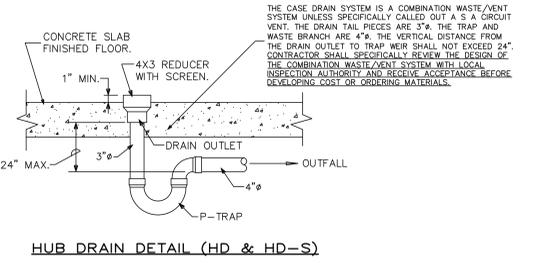
- ### GENERAL PLUMBING NOTES
- DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES, EQUIPMENT, ETC. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE AND ACCEPTABLE WORKING INSTALLATION. CONTRACTOR IS RESPONSIBLE TO INSTALL ALL FIXTURES AND EQUIPMENT IN STRICT COMPLIANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. THIS REQUIREMENT IS TO SUPERSEDE ANY DETAILS OR INFORMATION CONTAINED ON THESE DRAWINGS.
 - ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL, STATE, AND ALL LOCAL CODES AND ORDINANCES HAVING JURISDICTION.
 - THE PLUMBING CONTRACTOR SHALL VISIT THE SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS. ALL EXECUTION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
 - ALL NEW WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/ARCHITECT.
 - ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OR PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
 - THE PLUMBING CONTRACTOR SHALL SECURE AND PAY ALL PERMIT FEES, INSPECTIONS, AND TESTS.
 - ALL NEW WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
 - THE PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN (1) ONE YEAR FROM DATE OF ACCEPTANCE. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
 - VERIFY LOCATION, SIZE AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION. ADVISE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
 - ALL NEW FIXTURES SHALL BE PROVIDED WITH READILY ACCESSIBLE STOPS.
 - ALL NEW WATER PIPING SHALL BE TYPE "L" COPPER.
 - ALL NEW SOL. WASTES AND VENT PIPING SHALL BE PVC #40 DMV. WASTE AND VENT PIPING ABOVE SLAB SHALL BE PVC. IF APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION, OTHERWISE CAST IRON. PVC SHALL NOT BE INSTALLED IN A/C RETURN AIR PLENUM OR PENETRATE FIRE RATED WALLS OR FLOORS.
 - FURNISH AND INSTALL APPROVED WATER HAMMER ARRESTORS AT EACH GROUP OF FIXTURES. INSTALLATION OF WATER HAMMER ARRESTORS SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE AND INSTALL AN APPROVED WATER HAMMER ARRESTOR AT EACH FIXTURE OR DEVICE THAT HAS A SOLENOID WATER CONTROL VALVE.
 - PROVIDE CHROME PLATED COMBINATION COVERED PLATE AND CLEANOUT PLUG FOR ALL NEW WALL CLEANOUTS. JOSAM 58890.
 - INSULATE LINES AS FOLLOWS:
 A) 1" THICK ARMAFLEX PREFORMED INSULATION SHALL BE PROVIDED ON BOTH NEW C.W. & H.W. WHEN PIPING IS LOCATED OUTSIDE OF THE INSULATED BUILDING ENVELOPE.



3 MIXING VALVE FOR HAND SINKS AND LAV'S DETAIL
NO SCALE



2 HUB DRAIN DETAILS
NO SCALE



1 PARTIAL SANITARY ISOMETRIC
NO SCALE