PLUMBING SPECIFICATIONS

THE CONTRACTING FOR INSTALLATION OF PLUMBING SYSTEMS WILL BE ACCOMPLISHED IN THE FIELD AT THE DIVISION LEVEL (IN CASE OF A CONFLICT BETWEEN THIS SPECIFICATION AND THE CONTRACT DOCUMENTS AND/OR WRITTEN OR VERBAL INSTRUCTIONS PROVIDED BY THE CONSTRUCTION MANAGER. THE DOCOMEN'S MODOR WRITER OF VERSAL INSTRUCTIONS PROVIDED IN THE CONSTRUCTION MANAGES OF DISSION'S INSTRUCTION ASSAULT PREVAIL). HEREAFTER IN THIS SPECIFICATION, THE WORD "PLUMBING CONTRACTOR" SHALL REFER TO THE INSTALLING PLUMBING CONTRACTOR AND "OWNER" SHALL REFER TO T-ELEVEN.

1.2 SCOPE OF WORK

1.2.1 PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL PLUMBING FIXTURES, ACCESSORIES, AND ATTENDANT PIPING AS STATED HEREIN. REFER TO THE "PLUMBING PLANS AND THE "MATERIALS" PORTION OF THIS SPECIFICATION FOR EQUIPMENT TO BE FURNISHED. EXACT LOCATION OF ALL EQUIPMENT SHALL BE DETERMINED BY REFERENCE TO THE PLANS AND MEASUREMENTS AT THE BULDING SITE AND IN COOPERATION WITH OTHER CONTRACTORS AND IN ALL CASES SHALL BE SUBJECT TO THE OWNERS APPROVAL.

1.3 GENERAL
1.3.1 ALL SAFETY PRECAUTIONS SHALL BE TAKEN TO PROTECT PERSON, PROPERTY, AND EQUIPMENT.

1.3.2 NO COMPENSATION FOR WORK PERFORMED OVER AND ABOVE PROJECTS SUM SHALL BE ALLOWED DUE TO CONDITIONS WITH WHICH THE PLUMBING CONTRACTOR SHOULD HAVE BEEN FAMILIAR.

1.3.3 MAY DEVATION BY PLUMBING CONTRACTOR FROM THE PLANS AND SPECIFICATIONS, OR ANY SUBSTITUTION OF EQUIPMENT FROM THAT SPECIFIED, SHALL FIRST RECEIVE OWNER'S APPROVAL.

1.4 OPERATIONS AND INSTALLATION
1.4.1 ALL DELAPRIES TO COINCIDE WITH CONSTRUCTION SCHEDULE. MATERIALS SHALL BE STORED
WHERE ANJOR AS DIRECTED BY THE GENERAL CONTRACTOR, STORAGE MUST BE IN SUCH A PLACE AS TO AVOID ACCIDENTAL MUTILATION BY EQUIPMENT BY ANY CONTRACTOR WHILE PERFORMING THEIR WORK,

1.4.2 ALL UNDER FLOOR PIPING SHALL BE INSTALLED IN CONJUNCTION WITH THE GENERAL CONTRACTOR'S WORK SCHEDULE. NO UNDERGROUND WORK SHALL BE COVERED OR ENCLOSED UNTIL IT HAS BEEN INSPECTED AND TESTED.

1.4.3 PLUMBING CONTRACTOR SHALL DO THE NECESSARY TRENCHING, SHORING AND BACKFILLING REQUIRED TO FULFILL HIS CONTRACT. BOTTOMS OF TRENCHES SHALL BE CUT TO GRADE.

1.4.4 ALL OPENINGS AND STUB-UP FOR PLUMBING PIPING AND FIXTURES SHALL BE CAREFULLY LOCATED AND COORDINATED, OTHERWISE, PLUMBING CONTRACTOR SHALL CUT NEW OPENINGS AT HIS OWN EXPENSE, AND REIMBURSE OTHER SUBCONTRACTORS FOR ANY DAMAGE DONE TO THEIR WORK.

CODE AND PERMIT REQUIREMENTS

1.5.1 ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES, AND CODES, WHICH SHALL BE DELINEATED, AND ALL MODIFICATIONS REQUIRED BY THE INSPECTION AUTHORITIES SHALL BE MADE BY PLUMBING CONTRACTOR WITHOUT ADDITIONAL COST TO OWNER.

1.5.2 PLUMBING CONTRACTOR SHALL OBTAIN, PAY FOR AND FURNISH ALL PERMITS REQUIRED BY LOCAL OR STATE ORDINANCES OR COOSES, AND THESE COSTS SHALL BE STATED SEPARATELY ON THE PLUMBING CONTRACTOR'S INVOICES.

2.1.1 ABOVE AND BELOW GRADE WATER PIPING SHALL BE PEX TUBING CONFORMING TO ASTM F877 CROSS-LINKED POLYETHMENE TUBING HOT AND COLD WATER DISTRIBUTION SYSTEMS, ASTM F876 CROSS-LINKED POLYETHMENE TUBE, ASTM F1807 FITTING AND ASTM F2159 FITTINGS, COMPLY WITH NSF STANDARD 14 AND 61. PEX TUBING SHALL BE WATTS WATERPEX CROSS-LINKED POLYETHMENE OR EQUAL ALL PEX TUBING BELOW GRADE SHALL BE SLEEVED WITH PVC PIPE. 2.1.1.1 FITTINGS: HITTINGS SHALL BE WECHANICA CRUMP FITTINGS IN COMPLIANCE WITH ASTM F1807 AND F2159. PEX FITTINGS SHALL BE WATTS BRASS CRUMPRING FITTINGS USING EITHER WATTS COPPER CRUMPRING OR STANLESS STEEL CHARLED AND A COMPLIANCE WATH AND MILECULIESE'S RECONMENSATION. CINCHCLAMP OR EQUAL. INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

2.1.2 ABOVE AND BELOW GRADE WATER PIPING SHALL BE TYPE "L" AND "M" HARD DRAWN SEAMLESS COPPER TUBING CONFORMING TO ASTM BBB.

2.1.2.1 COPPER UNIONS: CAST-COPPER-ALLOY, HEXAGONAL-STOCK BODY, WITH BALL-AND-SOCKET, METAL-TO-METAL SEATING SURFACE AND SOLDER-JOINT. JOINING MATERIAL SHALL BE ASTM B813 MERE-PLUSHBAIE, LEAD-FREE FLUX ALLOY SOLDER.

2.2.1 ABOVE AND BELOW GRADE FILTERED WATER PIPING SHALL BE CPVC TUBING CONFORMING TO ASTM 02846 AND CSA B137 CHLORINATED POLY (WINY, CHLORIDE) PLASTIC HOT AND COLD WATER DISTRIBUTION SYSTEMS, ASTM 1978 RIGID AND CHLORINATED PVC COMPOUNDS, ASTM F493 SOLVENT CEMENTS, COMPLY WITH NSF STANDARD 14 AND 61. CPVC TUBING SHALL BE FLOWGUARD GOLD CPVC CTS

2.2.1.1 FITTINGS: FITTINGS SHALL BE SOCKET TYPE JOINTS IN COMPLIANCE WITH ASTM D2846 AND CSA B137. CPVC FITTINGS SHALL BE FLOWGUARD GOLD CPVC CTS FITTINGS OR EQUAL. JOINING MATERIAL SHALL BE ASTM F493 SOLVENT CEMENT. INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

2.3.1 ABOVE AND BELOW GRADE SOIL, WASTE AND VENT PIPING SHALL BE PVC PLASTIC, SCHEDULE 40 DWV PIPE CONFORMING TO ASTAM D2665 WITH PLAIN ENDS. CELLULAR (FOAM) CORE PVC NOT ALLOWED. INSTALL PER ASTM D2665 AND ASTM D2321.

2.3.1.1 FITTINGS SHALL BE PVC SOCKET-TYPE DWV PIPE FITTINGS; ASTM D2665 MADE TO ASTM D3311 DRAIN, WASTE AND VENT PATTERNS.

2.3.2 ABOVE AND BELOW GRADE SOIL, WASTE AND VENT PIPING SHALL BE HUB-AND-SPIGOT CAST-IRON SOIL PIPE AND FITTINGS CONFORMING TO ASTM A74 WITH ASTM C564 RUBBER GASKETS. INSTALL CAST-IRON SOIL PIPING ACCORDING TO CISPIS' CAST IRON SOIL PIPE AND FITTINGS HANDBOOK." CHAPTER IV, "INSTALLATION OF CAST IRON SOIL PIPE AND FITTINGS."

2.3.3 ABOVE GRADE SOIL, WASTE AND VENT PIPING SHALL BE ALLOWED TO BE COPPER DRAINAGE TUBING CONFORMING TO ASTM B306 AT PLUMBING CONTRACTOR'S OPTION.

2.4 FLASHING: SHEET LEAD. 4 POUNDS PER SQUARE FOOT, MINIMUM

2.5.1 DOMESTIC COLD WATER (WITHIN BUILDING):

COPPER PIPE: 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVI
EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROMISE A CONTINUOUS
PLONED OF COPPANITEED OWENS—CORNING OR ARMSTRONG. (SEE BELOW PLUMBING FITTING INSULATION REQUIREMENTS)

PEX TUBING: NO INSULA

EXCEPTION: FOR NON-RECIRCULAR FIBERGLASS COVERING HAVING A CONDUCTIVITY SELF-SEALING LAP TO PROVIDE A CONTINUA

CPVC TUBIN

LL ONE—PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT ECKET WITH SELF—SEALING LAP TO PROVIDE A CONTINUOUS VAPOR CEEDING 0.27 WI RIER BY CERTA ING OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING TION REQUIRE

1/2" WALL ONE-PIECE FIBERCLASS COVERING HAVING A CONDUCTIVITY NOT E RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR OWENS-CORNING OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING

FOR HOT WATER PIPING BEING SERVED BY SYSTEM WITH RECIRCULATING PUMP, PROVIDE 1" WALL ONE-PIECE FIBERGIASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELET-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTEES OWENS-CORNING OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS)

2.5.3 INDIRECT AND CONDENSATE DRAIN PIPING (WITHIN BUILDING):

COPPER PIPE: PROVIDE 1" FLEXIBLE UNICELLULAR INSULATION BY ARMACELL

FOR PIPING AT HANGERS, PROVIDE 8" LONG SECTIONS OF HIGH DENSITY, HIGH TEMPERATURE CALCIUM SILICATE BY JOHNS-MANNILE, FIBERGLASS BY KNAUF, OR 8" LONG STYROFOAM BILLETS BY DOW, INSULATION SHALL BE CONTINUOUS ALONG THE PIPE SURFACE, EXCEPT AT VALVES, UNIONS, AND WHERE PIPING IS EXPOSED AT FRITURES.

FOR HOT AND COLD WATER PIPING EXPOSED, CONCEALED IN WALLS, AND/OR INSTALLED INSIDE MASONRY UNITS OF WALLS, COVER FITTINGS WITH ZESTON, KNAUF, OR EQUAL ONE-PIECE PVC PREMOLDED INSULATION COVERS, FITTING COVERS, AGNACETS AND ADDRESSES SHAUL NOT EXCEED FLAUE SPREAD RATING OF 25 AND SMOKE DEVELOPMENT RATING OF 25 PRE ASTIM EB4. AT ALL ELBOWS AND TEES, FILL VIOUS BETWEEN COVERS AND PIPING WITH FBERGALSS INSULATION AND TAPE CONTS. INSTALL PPE INSULATION IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS. WHERE PREMOLDED INSULATING FITTINGS ARE NOT APPROVED BY LOCAL AUTHORITIES, MITER INSULATION AT FITTINGS.

Provide hard drawn, type "M" or "L" copper pipe for all condensate drain piping from cooler and freezer evaporators. Provide heat trace for all condensate drain piping located in freezers, and route to floor drain in building.

PROVIDE PVC PIPE FOR ALL OTHER INDIRECT AND CONDENSATE DRAIN PIPING FROM HVAC, PLUMBING, AND BEVERAGE EQUIPMENT, AND ROUTE TO FLOOR DRAIN IN BUILDING.

3.1 THE ENTIRE PLUMBING SYSTEM SHALL BE TESTED BEFORE COVERING OR ENCLOSING.

WORK SHALL BE INSPECTED FOR COMPLIANCE WITH CODES, ORDINANCES, REGULATIONS AND ADHERENCE TO CONTRACT DOCUMENTS. PLUMBING CONTRACTOR STALL SUPPLY OWNER WITH SIGNED FORMS OR PROOF OF ACCEPTANCE BY THE LOCAL AUTHORITY BEFORE CONTINUING FROM ONE STAGE TO ANOTHER. FINAL APPROVAL SHALL BE OBTAINED BEFORE FINAL PAYMENT IS MADE ON THE CONTRACT.\

3.3 PERFORMANCE REQUIRED:

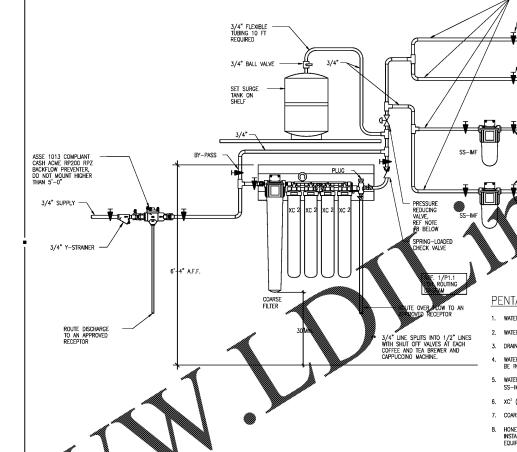
 $3.3.1\ \mbox{Plumbing contractor}$ shall install all plumbing systems leak free and as per plans and specifications.

3.3.2 ALL EXPOSED EQUIPMENT SHALL BE INSTALLED IN A WORKMANLIKE MANNER AND WILL BE SUBJECT TO ARCHITECTURAL INSPECTION FOR AESTHETIC APPEARANCE.

4.1 PLUMBING CONTRACTOR SHALL CLEAN ENTIRE SITE OF DEBRIS, TOOLS AND EQUIPMENT RELATED TO THIS WORK.

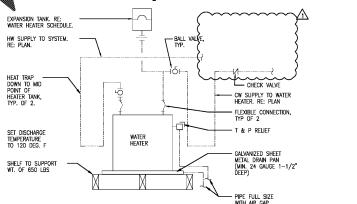
4.2 PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUITING AND PATCHING OF HIS WORK WHICH MAY BE REQUIRED TO RELIEVE THE WORK OF OTHER CONTRACTORS.

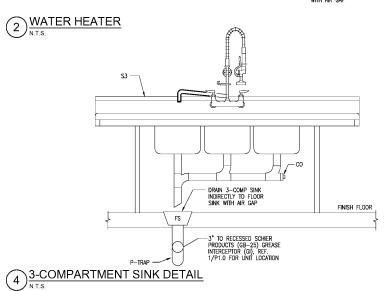
5.1 PLUMBING CONTRACTOR SHALL GUARANTEE ALL OF THE WORK AND THE COMPLETE OPERATION WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIULS, PLUMBING CONTRACTOR AGRESS TO REPUACE, WITHOUT EXPENSE TO THE OWNER, ANY PART OF HIS WORK ON THIS INSTALLATION WHICH PROVES TO BE DEFECTIVE WITHIN ONE (1) YEAR AFTER ACCEPTANCE OF THE WORK.



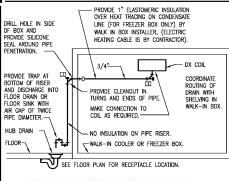
INTERPLAN CPVC BEVERAGE TUBINO TAG SLURPER · 3/4" REINFORCED PLASTIC LINE TO SLURPEE ABOVE CEILING. PROVIDE CHECK VALVE CONFORMING TO ASSE 1022 ARCHITECTUR ENGINEERING INTERIOR DESIGN MANAGEMENT 3/4" REINFORCED PLASTIC LINE TO POST MIX ABOVE CEILING. PROVIDE CHECK VALVE CONFORMING TO ASSE 1022 ΔΔ 003/12 CA 866 SUITE 10 NDO, FLORIDA 32804 - 1/2" LINE TO ICE MAKER ABOVE CEILING. PROVIDE CHECK VALVE CONFORMING TO ASSE1022 PH 407.645.5008 FX 407.629.9124 TAG ICE MAKER -REGULATOR @ ICE MAKER TO < 60 PSI-PENTAIR EVERPURE FILTER SYSTEM MODEL WATER SUPPLY MUST BE 3/4" INCH WATER SHUT-OFF VALVE SHALL BE "BALL LOCK" TYPE. POSITIVE ON-OFF 3. DRAIN MUST BE PROVIDED TO PERMIT FLUSHING OF NEW FILTERS. WATER FOR ICE MAKERS, COFFEE MAKERS, AND CAPPUCCINO MACHINES SHALL BE ROUTED THROUGH THE SS-IMF UNITS. 5. WATER FOR FSD AND FCB EQUIPMENT SHOULD NOT BE ROUTED THROUGH THE SS-IMF UNITS (WILL REDUCE CARBONATION). XC² (CARBON) FILTERS MUST BE REPLACED IN SETS. 7. COARSE FILTER AND SS-IMF UNITS MAY BE CHANGED INDIVIDUALLY. HONEYWELL PRESSURE REDUCING VALVE MODEL DS05C1030 (SET AT 55 PSI)
 INSTALLED AFTER TEE TO SURGE TANK AND BEFORE FIRST TEE TO BEVERAGE EQUIPMENT.

EVERPURE WATER PURIFICATION SYSTEM





CONTROL MODULE 3 LAV SHROUD



INSTALL PIPE HIGH AS POSSIBLE, ANCHORED TO WALL OF BOX WITH SUPPORTS AT MAXIMUM SIX FOOT CENTERS. USE TYPE "M" HARD COPPER TUBE AND FITTINGS WITH LEAD-FREE SOLDER JOINTS. SLOPE HORIZOTTAL PIPE AT MINIMUM TWO PERCENT. REFER TO LOCAL CODE FOR INDIRECT DRAIN REQUIREMENTS.

5 CONDENSATE DRAIN DETAIL

5 N.T.S.

06.21.17 PEER REVIEW COMMENT DATE REMARKS EVISIONS



BID SET JANUARY 8, 2018

7-ELEVEN STORE #32810

544 RONALD REAGAN PARKW DAVENPORT, FL

ROJECT NO: 2016.0305 DATE: MAY 31, 2017

PLUMBING DETAILS & SPECIFICATION

HECKED: PD DRAWN: MM