

| PLUMBING FIXTURE SCHEDULE | | | | | | | | |
|---------------------------|---|---|--|----------------|------|----------|--------|---|
| MARK | DESCRIPTION | MANUFACTURER CATALOG NUMBER | ACCESSORIES | SIZES (INCHES) | | | | REMARKS |
| | | | | CW | HW | W | V | |
| WC-1 | FLOOR MOUNTED, WHITE VITREOUS CHINA, ELONGATED BOWL, OPEN FRONT SEAT (ANTIMICROBAL/FIRE RETARDANT), RIM HEIGHT 14", FLUSH VALVE - 1.6 GPF | AMERICAN STANDARD "MADERA" #2234.015 | SEAT: CHURCH #1955CTFR F.V.: SLOAN ROYAL II #111-ES-S-1.6 | 1" | - | 4" | 2" | |
| WC-2 (ADA) | FLOOR MOUNTED, WHITE VITREOUS CHINA, ELONGATED BOWL, OPEN FRONT SEAT (ANTIMICROBAL/FIRE RETARDANT), RIM HEIGHT 17", FLUSH VALVE - 1.6 GPF | AMERICAN STANDARD "MADERA" #3043.102 | SEAT: CHURCH #1955CTFR F.V.: SLOAN ROYAL II #111-ES-S-1.6 | 1" | - | 4" | 2" | |
| U-1 | WALL MOUNTED, WHITE VITREOUS CHINA, RIM HEIGHT 24", 14" FROM WALL TO LIP, FLUSH VALVE - 0.5 GPF | AMERICAN STANDARD "WASHBROOK FLOWSIE" #6590.125 | F.V.: SLOAN ROYAL II #186-0.5-ES-S | 3/4" | - | 2" | 2" | |
| U-2 (ADA) | WALL MOUNTED, WHITE VITREOUS CHINA, RIM HEIGHT 17", 14" FROM WALL TO LIP, FLUSH VALVE - 0.5 GPF | AMERICAN STANDARD "WASHBROOK FLOWSIE" #6590.125 | F.V.: SLOAN ROYAL II #186-0.5-ES-S | 3/4" | - | 2" | 2" | |
| L-1 | WALL HUNG, WHITE VITREOUS CHINA, 4" CENTERS, 1.5 GPM SENSOR FAUCET WITH GRID STRAINER, PROVIDE TRUEBO INSULATION FOR PIPING BELOW SINK | AMERICAN STANDARD "LUCERNE" #0355.012 | FAUCET: SYMMONS #S-6090-ACM McGUIRE: #216SLK ANGLE STOPS McGUIRE 17 GAUGE P-TRAP | 1/2" | 1/2" | 1-1/2" | 1-1/2" | PROVIDE S-6240 MULTI-UNIT TRANSFORMER WHERE MORE THAN ONE L-1 IS LOCATED IN SAME AREA |
| L-2 | DECK MOUNTED, WHITE VITREOUS CHINA, 4" CENTERS, 1.5 GPM SENSOR FAUCET WITH GRID STRAINER, PROVIDE TRUEBO INSULATION FOR PIPING BELOW SINK | AMERICAN STANDARD "AQUALYN" #0476.028 | FAUCET: SYMMONS #S-6090-ACM McGUIRE: #216SLK ANGLE STOPS McGUIRE 17 GAUGE P-TRAP | 1/2" | 1/2" | 1-1/2" | 1-1/2" | |
| MS-1 | 24"x24"x10" DEEP MOUNTED STONE MOP BASIN, 3" OUTLET WITH STAINLESS STEEL STRAINER | FIAT #MSB2424 | FAUCET: #830AA HOSE AND BRACKET: #832AA | 1/2" | 1/2" | 3" | 2" | |
| FD | ROUND CAST IRON FLOOR DRAIN WITH ADJUSTABLE NICKEL BRONZE STRAINER, AND TRAP PRIMER CONNECTION | J.R. SMITH #2005A | | 1/2" | - | AS NOTED | 2" | |
| FCO | ROUND FLOOR CLEAN OUT, NICKEL BRONZE TOP | J.R. SMITH #4020 | | - | - | AS NOTED | - | |
| TP | TRAP PRIMER, DISTRIBUTION UNITS AS REQUIRES | PRECISION PLUMBING #PR-50 | | 1/2" | - | - | - | |

| PLUMBING SYMBOLS & ABBREVIATIONS | | | |
|----------------------------------|--------------------------------|--------|--------------------------------|
| MARK | DESCRIPTION | MARK | DESCRIPTION |
| DCW | DOMESTIC COLD WATER LINE | | DOMESTIC COLD WATER LINE |
| DHW | DOMESTIC HOT WATER LINE | | DOMESTIC HOT WATER LINE |
| DHC | DOMESTIC HOT WATER RECIRC LINE | | DOMESTIC HOT WATER RECIRC LINE |
| SAN | SANITARY DRAIN LINE | | SANITARY DRAIN LINE |
| V | SANITARY VENT LINE | | SANITARY VENT LINE |
| GW | GREASE WASTE DRAIN LINE | —GW— | GREASE WASTE DRAIN LINE |
| GV | GREASE VENT LINE | —GV— | GREASE VENT LINE |
| G | NATURAL GAS LINE | —G— | NATURAL GAS LINE |
| WCO | WALL CLEAN OUT | A.F.F. | ABOVE FINISHED FLOOR |
| FCO | FLOOR CLEAN OUT | HB | HOSE BIB |
| COTG | CLEAN OUT TO GRADE | VTR | VENT THRU ROOF |
| ⊥ | PIPE DOWN | ⊥ | BALL VALVE |
| ⊕ | PIPE UP | ⊕ | BUTTERFLY VALVE |
| ⊕ | FCO / COTG | ⊕ | GATE VALVE |
| | END OF LINE CLEANOUT | ⊕ | GLOBE VALVE |
| ⊥ | END CAP | ⊥ | CHECK VALVE |
| ⊥ | HOSE BIB | ⊕ | RISER DESIGNATION |

UNLESS NOTED OTHERWISE, DOMESTIC WATER AND SANITARY VENT PIPING SHOWN ARE ABOVE CEILING AND SANITARY DRAIN IS BELOW FLOOR.

PLUMBING SPECIFICATIONS:

- I. GENERAL
- ALL PLUMBING MATERIALS, INSTALLATION, TESTING, CLEANING, SUPPORTS, AND WORKMANSHIP SHALL BE IN STRICT ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE 2000 EDITION OF THE UNIFORM PLUMBING CODE, WITH THE CITY OF HOUSTON AMENDMENTS AND ALL APPLICABLE LOCAL AND STATE REQUIREMENTS.
 - ALL PLUMBING PIPING, EQUIPMENT AND FIXTURE INSTALLATION SHALL BE PERFORMED BY A LICENSED PLUMBER OR AN APPRENTICE THAT IS UNDER SUPERVISION BY A LICENSED PLUMBER.
 - ALL PIPING, SUPPORTS, JOINT CONNECTION MATERIALS, EQUIPMENT AND FIXTURES SHALL BE NEW. DAMAGED AND/OR USED MATERIALS WILL NOT BE ACCEPTABLE.
 - ALL EXCEPTIONS OR SUBSTITUTIONS TAKEN TO SPECIFIED MATERIALS, FIXTURES, EQUIPMENT OR REQUIREMENTS OF THESE DOCUMENTS SHALL BE SUBMITTED TO THE OWNER OR HIS REPRESENTATIVE, AND APPROVAL OBTAINED PRIOR TO PURCHASING AND INSTALLATION.
 - REFER TO PROJECT CONTRACT DOCUMENTATION AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
 - GUARANTEE LABOR AND MATERIALS FOR 1 YEAR. WARRANTIES BEGIN UPON OWNER'S ACCEPTANCE OF SUBSTANTIAL COMPLETION OF THE INSTALLATION.**
 - SUBMIT SHOP DRAWINGS FOR ALL FIXTURES, TRIM, EQUIPMENT, SPECIALTIES AND INSULATION. OPERATIONS AND MAINTENANCE INSTRUCTIONS: PROVIDE 3 COPIES OF OPERATION AND MAINTENANCE MANUALS TO OWNER. PROVIDE INSTRUCTION ON SYSTEM OPERATION TO OWNER'S REPRESENTATIVES.
 - PROVIDE RECORD DRAWINGS IN AUTOCAD 2000 OR HIGHER AND HARD COPY ON REPRODUCIBLE MEDIA SHOWING EXACT DIMENSIONS TO ALL UNDER SLAB PIPING AND SHOW FLOW LINES. DRAWING CAD FILES CAN BE ORDERED FOR A FEE FROM REDDING LINDEN BURR ENGINEERS.
 - PROVIDE ELECTRICAL CONTRACTOR WITH ELECTRICAL REQUIREMENTS OF APPROVED EQUIPMENT IN SUFFICIENT TIME FOR HIM TO ORDER PANEL BOARDS, DISCONNECTS, ETC.
 - PROVIDE MILCOR OR EQUAL ACCESS DOORS FOR ACCESS TO ALL VALVES, CONTROLS, WATER HAMMER ARRESTORS, OR OTHER DEVICES REQUIRING ATTENTION. DOORS SHALL MATCH WALL OR CEILING RATING. ARCHITECT MUST APPROVE LOCATION AND APPEARANCE OF ALL ACCESS DOORS.
- II. PIPING
- SUPPORT ALL ABOVE FLOOR PIPING UTILIZING SUPPORT SYSTEMS MANUFACTURED FOR THE APPLICABLE INSTALLATION. WIRE OR TAPE SUPPORTS ARE NOT ACCEPTABLE.
 - ISOLATE ALL WATER PIPING FROM DIRECT CONTACT WITH STRUCTURAL MEMBERS (STUDS, JOISTS, BEAMS, ETC.) TO PREVENT THE TRANSMISSION OF SOUND.
 - PROVIDE INSULATION SHIELDS AT HANGER POINTS FOR INSULATED PIPING. PROVIDE COPPER HANGERS FOR NON-INSULATED COPPER PIPING.
 - MAKE CONNECTIONS BETWEEN DISSIMILAR PIPING MATERIALS WITH ADAPTORS MANUFACTURED FOR THE APPLICABLE TYPE OF TRANSITION.
 - PROVIDE DIELECTRIC ISOLATION DEVICE (DIELECTRIC UNION OR COUPLING) WHERE COPPER LINES CONNECT TO FERROUS LINES OR EQUIPMENT.
 - ALL WASTE & VENT PIPING SHALL CONFORM TO ASTM A 888 AND BE CAST IRON SOIL PIPE WITH DWV NO-HUB FITTINGS AND CLAMPS. NO-HUB CLAMPS SHALL BE MANUFACTURED BY TYLER PIPE, STAR PIPE, CLAMP-ALL, HUSKY OR MISSION.
 - ALL DOMESTIC WATER PIPING SHALL BE TYPE "L" COPPER WITH WROUGHT COPPER OR CAST BRONZE FITTINGS USING LEAD-FREE SOLDER JOINTS.
 - INSULATE ALL EXPOSED DRAIN AND WATER SUPPLY PIPING BENEATH HANDICAP ACCESSIBLE SINKS WITH CLOSED CELL INSULATING KIT AS MANUFACTURED BY TRUEBRO OR MCGUIRE.
 - INSULATE ENTIRE DOMESTIC HOT WATER PIPING WITH 25/50, 1" GLASS FIBER PIPE INSULATION WITH ALL SERVICE JACKET.
 - FLOOR DRAINS RECEIVING CONDENSATE FROM HVAC UNITS OR ICE MACHINES SHALL BE INSULATED MINIMUM 5 ft. DOWNSTREAM OF DRAIN.
 - PROVIDE AIR CHAMBERS ON ALL FIXTURES SUPPLIES, SIZE PER PLUMBING CODE. WATER HAMMER ARRESTORS SHALL BE PROVIDED AS NOTED ON PLAN. SIZE AS PER PDI STANDARDS.
- III. VALVES
- DOMESTIC WATER LINE SHUT-OFF VALVES SHALL BE CONVENTIONAL PORT BALL TYPE AND HAVE BLOW-OFF PROOF STEM, PLASTIC COATED HANDLE, TEFLON PACKING, BRONZE BODY WITH SOLID BRASS BALL, RATED AT 600 WOG AND MANUFACTURED BY MILWAUKEE MODELS BA-100 AND BA-150 OR EQUAL BY NIBCO. INSTALL ALL VALVES IN EASILY ACCESSIBLE LOCATIONS. (PROVIDE VALVES LOCATED BELOW GROUND WITH THREADED CONNECTIONS).
 - REPLACE EXISTING VALVES, AS REQUIRED. SEE NOTE "A" THIS SECTION. COORDINATE WITH BUILDING ENGINEER.
- IV. FIXTURES AND EQUIPMENT
- REFER TO FIXTURE SCHEDULE ON THIS SHEET. PROVIDE ALL ADDITIONAL ACCESSORIES THAT MAY NOT BE SPECIFICALLY CALLED THAT ARE REQUIRED TO FACILITATE A FIRST CLASS INSTALLATION.
 - ALL NEW FIXTURES SHALL MEET THE WATER CONSERVATION REQUIREMENTS OF THE STATE OF TEXAS.
 - SEAL SPACE WHERE FIXTURES AND TRIM MEET WALL, FLOOR OR COUNTERTOP WITH WHITE TILE CAULKING.
 - PROVIDE OWNER WITH OPERATION AND MAINTENANCE MANUALS AND WARRANTY INFORMATION FOR ALL FIXTURES, TRIM, EQUIPMENT AND ACCESSORIES FURNISHED. AQUAINT AND INSTRUCT OWNER OF OPERATION OF ALL SYSTEMS, EQUIPMENT AND FIXTURES INSTALLED.

PLUMBING GENERAL NOTES:

- CONTRACTOR SHALL FIELD VERIFY SIZE, LOCATION, AND CONDITION OF EXISTING PIPING BEFORE PROCEEDING WITH BID AND CONSTRUCTION. ANY REUSED PIPING FOUND TO BE IN POOR CONDITION OR NOT PER CURRENT CODE REQUIREMENTS SHALL BE DOCUMENTED AND THE ENGINEER SHALL BE MADE AWARE OF THIS CONDITION IMMEDIATELY.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF EQUIPMENT AND UTILITIES.
- ALL NEW CONSTRUCTION MATERIALS AND PRODUCTS TO BE USED IN THE BUILDING MUST BE CERTIFIED BY THE MANUFACTURE AS ASBESTOS FREE OR ARE ACCOMPANIED BY MATERIAL SAFETY DATA SHEETS/PRODUCT DATA SHEETS THAT INDICATE THEY ARE ASBESTOS FREE.
- ANY EXISTING PVC PIPING LOCATED IN A RETURN AIR PLENUM SHALL BE REPLACED WITH NEW PIPING. THIS SHALL BE DOCUMENTED AND THE ENGINEER SHALL BE MADE AWARE OF THIS CONDITION IMMEDIATELY.

FIRE SPRINKLER COORDINATION NOTES:

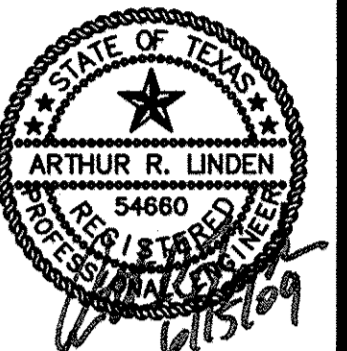
- BUILDING IS CURRENTLY SPRINKLED; ADD NEW HEADS AND REVISE HEADS AS REQUIRED TO ACCOMMODATE WALL AND CEILING REVISIONS. PROJECT AREA SHALL BE FULLY SPRINKLED.
- ALL FINAL HEAD LOCATIONS SHALL BE APPROVED BY THE ARCHITECT AND SHALL TYPICALLY BE CENTERED (+ or - 2") IN CEILING TILES. ALL NEW HEADS SHALL MATCH EXISTING. COORDINATE FINAL TRIMMING WITH ARCHITECT AND BUILDING MANAGER/ENGINEER.
- WORK SHALL BE BY A LICENSED SPRINKLER CONTRACTOR IN ACCORDANCE WITH THE NFPA 13.
- PIPING TO BE SCHEDULE 40 BLACK STEEL, ASTM A135 w/125lb. CAST IRON SCREWED FITTINGS. ALL PIPING SHALL BE CONCEALED ABOVE FINISHED CEILINGS. COORDINATE PIPE ROUTING WITH OTHER TRADES.

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BRISTOW BUILDING RENOVATION II
FOR HARRIS COUNTY MHMRA
HOUSTON, TEXAS
2627 CAROLINE

PROJECT
09-026(A)

DATE
06/15/09
DRAWN BY

REVISIONS

SHEET

P-4