

| ABBREVIATIONS |                                  |     |                         | GENERAL NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GENERAL DEMOLITION NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CENTER FOR STUDENT LEARNING CHARTER SCHOOL AT PENNSBURY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------|----------------------------------|-----|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AV            | AIR ADMITTANCE VALVE             | PRV | PRESSURE REDUCING VALVE | <div>1. THE FOLLOWING NOTES APPLY TO ALL PLUMBING DRAWINGS.</div> <div>2. ALL WORK SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE 2021 AND ALL OTHER APPLICABLE CODES AND STANDARDS.</div> <div>3. ALL DRAWINGS ARE DIAGRAMMATIC. PLUMBING CONTRACTOR SHALL CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO STARTING WORK.</div> <div>4. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, SIZES, CLEARANCES AND LOCATIONS PRIOR TO THE START OF CONSTRUCTION. WHEN CONFLICTS ARISE, MAKE ANY NECESSARY CHANGES TO ROUTING OF ANY PIPING AT NO ADDITIONAL COST.</div> <div>5. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.</div> <div>6. SCHEDULES DO NOT REPRESENT EQUIPMENT QUANTITIES. REFER TO THE PLANS FOR ACTUAL QUANTITIES.</div> <div>7. PLUMBING CONTRACTOR SHALL PROVIDE FIREPROOF PIPE SLEEVES AT ALL NEW PIPING PENETRATIONS THRU FIRE RATED WALLS AND FLOORS.</div> <div>8. MANUFACTURERS AND MODEL NUMBERS INDICATED ON THE PLANS, SCHEDULES AND SKETCHES ARE PROVIDED AS A BASIS OF DESIGN ONLY. BIDDERS SHALL REFER TO THE SPECIFICATIONS FOR A LISTING OF MULTIPLE ACCEPTABLE MANUFACTURERS FOR EACH OF THESE ITEMS. SIMILAR PRODUCTS FROM ANY OF THESE MANUFACTURERS MAY BE FURNISHED PROVIDED THEY MEET THE INTENT OF THE SPECIFICATIONS. ANY CHANGES TO THE DESIGN REQUIRED AS A RESULT OF A SUBSTITUTION ARE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.</div> | <div>1. ALL WORK UNDER THIS SECTION SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.</div> <div>2. DEMOLITION/RELOCATIONS: EACH TRADE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND RELOCATIONS OF SERVICES, EQUIPMENT AND MATERIAL RELATING TO THEIR RESPECTIVE TRADE.</div> <div>3. PRIOR TO DEMOLITION CONTRACTOR SHALL REVIEW WITH OWNER ALL MATERIALS TO BE REMOVED. SHOULD THE OWNER OPT TO KEEP ANY MATERIALS, THE CONTRACTOR SHALL REMOVE AND DELIVER THE PARTS TO THE OWNER ON THE SITE WHERE SO DIRECTED. OTHERWISE, ALL DEMOLISHED OR REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, SHALL BE REMOVED FROM THE SITE, AND BE DISPOSED OF IN A LEGAL MANNER.</div> <div>4. DEMOLITION SHALL INCLUDE REMOVAL OF ALL PARTS AND PIECES IN THEIR ENTIRETY BACK TO THE POINTS INDICATED OR IF NOT INDICATED BACK TO THEIR POINT OF SOURCE. WHERE CONDITIONS PROHIBIT TOTAL REMOVAL OF THE WORK, THE REMAINING PORTION SHALL BE CUT FLUSH WITH THE SURROUNDING SURFACE SHALL BE REFINISHED IN AN APPROVED MANNER.</div> <div>5. MAINTAIN EXISTING UTILITIES INDICATED OR WHERE REQUIRED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN SCHEDULED WITH THE OWNER.</div> <div>6. DO NOT REMOVE EXISTING STRUCTURAL WORK. DO NOT REMOVE OPERATIONAL ELEMENTS AND SAFETY-RELATED COMPONENTS IN A MANNER RESULTING IN A REDUCTION OF CAPACITIES TO PERFORM IN THE MANNER INTENDED OR RESULTING IN DECREASED OPERATIONAL LIFE, INCREASED MAINTENANCE, OR DECREASED SAFETY.</div> <div>7. REMOVALS, DISCONNECTIONS, AND RELOCATIONS SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE INVOLVED AND SHALL BE EMPLOYED BY A CONTRACTOR LICENSED IN THE TRADE INVOLVED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ACCEPTED TRADE PRACTICES.</div> <div>8. PROVIDE ADEQUATE TEMPORARY SUPPORT FOR WORK TO REMAIN TO PREVENT FAILURE. DO NOT ENDANGER OTHER WORK.</div> <div>9. PROTECTION: PROVIDE ADEQUATE PROTECTION WHERE REQUIRED FOR THE PRESENT BUILDING AND ITS CONTENTS. TEMPORARY DUSTPROOF BARRIERS AND BARRICADES SHALL BE ERRECTED WHERE REQUIRED FOR PROTECTION OF PERSONNEL, PROTECTION FROM DUST AND DIRT, FOR SECURITY, FIRE AND WEATHER PROTECTIVE REASONS. CONTRACTOR SHALL TAKE EVERY PRECAUTION AGAINST FIRE BY EMPLOYING FIRE DEPARTMENT TYPE HOSES AND PORTABLE FIRE EXTINGUISHERS AS REQUIRED BY OSHA AND/OR THE OWNER'S INSURANCE UNDERWRITER.</div> <div>10. EXTREME CARE SHALL BE EXERCISED FOR ALL EXISTING ITEMS THAT ARE TO REMAIN IN SERVICE UNTIL NEW ITEMS ARE INSTALLED FOR THE SAME SERVICE. ALL SHUTDOWNS OF ANY SYSTEM SHALL BE COORDINATED WITH THE OWNER.</div> <div>11. ALL DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO STARTING WORK</div> | <div>1. ALL WORK UNDER THIS SECTION SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.</div> <div>2. DEMOLITION/RELOCATIONS: EACH TRADE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND RELOCATIONS OF SERVICES, EQUIPMENT AND MATERIAL RELATING TO THEIR RESPECTIVE TRADE.</div> <div>3. PRIOR TO DEMOLITION CONTRACTOR SHALL REVIEW WITH OWNER ALL MATERIALS TO BE REMOVED. SHOULD THE OWNER OPT TO KEEP ANY MATERIALS, THE CONTRACTOR SHALL REMOVE AND DELIVER THE PARTS TO THE OWNER ON THE SITE WHERE SO DIRECTED. OTHERWISE, ALL DEMOLISHED OR REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, SHALL BE REMOVED FROM THE SITE, AND BE DISPOSED OF IN A LEGAL MANNER.</div> <div>4. DEMOLITION SHALL INCLUDE REMOVAL OF ALL PARTS AND PIECES IN THEIR ENTIRETY BACK TO THE POINTS INDICATED OR IF NOT INDICATED BACK TO THEIR POINT OF SOURCE. WHERE CONDITIONS PROHIBIT TOTAL REMOVAL OF THE WORK, THE REMAINING PORTION SHALL BE CUT FLUSH WITH THE SURROUNDING SURFACE SHALL BE REFINISHED IN AN APPROVED MANNER.</div> <div>5. MAINTAIN EXISTING UTILITIES INDICATED OR WHERE REQUIRED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN SCHEDULED WITH THE OWNER.</div> <div>6. DO NOT REMOVE EXISTING STRUCTURAL WORK. DO NOT REMOVE OPERATIONAL ELEMENTS AND SAFETY-RELATED COMPONENTS IN A MANNER RESULTING IN A REDUCTION OF CAPACITIES TO PERFORM IN THE MANNER INTENDED OR RESULTING IN DECREASED OPERATIONAL LIFE, INCREASED MAINTENANCE, OR DECREASED SAFETY.</div> <div>7. REMOVALS, DISCONNECTIONS, AND RELOCATIONS SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE INVOLVED AND SHALL BE EMPLOYED BY A CONTRACTOR LICENSED IN THE TRADE INVOLVED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ACCEPTED TRADE PRACTICES.</div> <div>8. PROVIDE ADEQUATE TEMPORARY SUPPORT FOR WORK TO REMAIN TO PREVENT FAILURE. DO NOT ENDANGER OTHER WORK.</div> <div>9. PROTECTION: PROVIDE ADEQUATE PROTECTION WHERE REQUIRED FOR THE PRESENT BUILDING AND ITS CONTENTS. TEMPORARY DUSTPROOF BARRIERS AND BARRICADES SHALL BE ERRECTED WHERE REQUIRED FOR PROTECTION OF PERSONNEL, PROTECTION FROM DUST AND DIRT, FOR SECURITY, FIRE AND WEATHER PROTECTIVE REASONS. CONTRACTOR SHALL TAKE EVERY PRECAUTION AGAINST FIRE BY EMPLOYING FIRE DEPARTMENT TYPE HOSES AND PORTABLE FIRE EXTINGUISHERS AS REQUIRED BY OSHA AND/OR THE OWNER'S INSURANCE UNDERWRITER.</div> <div>10. EXTREME CARE SHALL BE EXERCISED FOR ALL EXISTING ITEMS THAT ARE TO REMAIN IN SERVICE UNTIL NEW ITEMS ARE INSTALLED FOR THE SAME SERVICE. ALL SHUTDOWNS OF ANY SYSTEM SHALL BE COORDINATED WITH THE OWNER.</div> <div>11. ALL DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO STARTING WORK</div> | <div>HECKENDOM SHILES ARCHITECTS</div> <div>CLIENT</div> <div>CSL</div> <div>345 Lakeside Drive</div> <div>Levittown, PA 19054</div> <div>215-269-7390</div> <div>ARCHITECTURAL</div> <div>Heckendom Shiles Architects</div> <div>347 East Conestoga Road</div> <div>Wayne, PA 19087</div> <div>610-994-3500</div> <div>STRUCTURAL ENGINEER</div> <div>AW Lookup Corporation</div> <div>500 Fayette St., Suite 100</div> <div>Conshohocken, PA 19428</div> <div>610-852-2600</div> <div>MEPPF ENGINEER</div> <div>Schiller &amp; Hersh Associates</div> <div>636 Skippack Pike, Suite 200</div> <div>Blue Bell, PA 19422</div> <div>215-886-8947</div> <div>CIVIL ENGINEER</div> <div>Bohler Engineering</div> <div>636 Market Street Suite 920</div> <div>Philadelphia, PA 19102</div> <div>267-402-3400</div> |
| AB            | ABANDONED                        |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| AD            | AREA DRAIN                       | R   | REMOVE                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| AFF           | ABOVE FINISHED FLOOR             | RBF | RUN BELOW FLOOR         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| BF            | BELOW FLOOR                      | RD  | ROOF DRAIN              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| BFP           | BACK FLOW PREVENTER              | RWC | RAIN WATER CONDUCTOR    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CA            | COMPRESSED AIR                   | SA  | SHOCK ABSORBER          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CO            | CLEAN OUT                        | SAN | SANITARY                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CW            | DOMESTIC COLD WATER              | SS  | SERVICE SINK            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| DF            | DRINKING FOUNTAIN                | SH  | SHOWER                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| DN            | DOWN                             | SK  | SINK                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| DW            | DISHWASHER                       | ST  | STORM                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| DWR           | DOMESTIC WATER RISER             | SW  | SAFE WASTE              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| (E)           | EXISTING                         | TW  | TEMPERED WATER          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| EC            | ELECTRICAL CONTRACTOR            | UR  | URINAL                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| EW            | ELECTRIC WATER COOLER            | V   | VENT                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| FAI           | FRESH AIR INLET                  | W   | WASTE                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| (F)FD         | FUTURE FLOOR DRAIN               | WC  | WATER CLOSET            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| FD-A          | FLOOR DRAIN (A - INDICATES TYPE) | WCO | WALL CLEANOUT           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| FU            | FIXTURE UNIT                     | WH  | WALL HYDRANT            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| GC            | GENERAL CONTRACTOR               |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| G             | GAS                              |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| HB            | HOSE BIBB                        |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| HW            | DOMESTIC HOT WATER               |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| HWH           | HOT WATER HEATER                 |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| HWR           | DOMESTIC HOT WATER RECIRCULATION |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| IW            | INDIRECT WASTE                   |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| LAV           | LAVATORY                         |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| MAX           | MAXIMUM                          |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| MIN           | MINIMUM                          |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| MC            | MECHANICAL CONTRACTOR            |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| MH            | MANHOLE                          |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| MR            | MOP RECEPTOR                     |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| N             | NEW WORK                         |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| NC            | NORMALLY CLOSED                  |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| NO            | NORMALLY OPEN                    |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| NTS           | NOT TO SCALE                     |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| NIC           | NOT IN CONTRACT                  |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| OFD           | OVERFLOW DRAIN                   |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| OS&Y          | OUTSIDE SCREW & YOKE GATE VALVE  |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| PC            | PLUMBING CONTRACTOR              |     |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

[illegible]

CIVIL ENGINEER  
Bohler Engineering  
636 Market Street Suite 920  
Philadelphia, PA 19102  
267-402-3400

# P001

PROJECT TEAM

CLIENT  
CSL  
345 Lakeside Drive  
Levittown, PA 19054  
215-269-7390

ARCHITECTURAL  
Heckendorn Shiles Architects  
347 East Conestoga Road  
Wayne, PA 19087  
610-994-3500

STRUCTURAL ENGINEER  
AW Lookup Corporation  
500 Fayette St., Suite 100  
Conshohocken, PA 19428  
610-852-2600

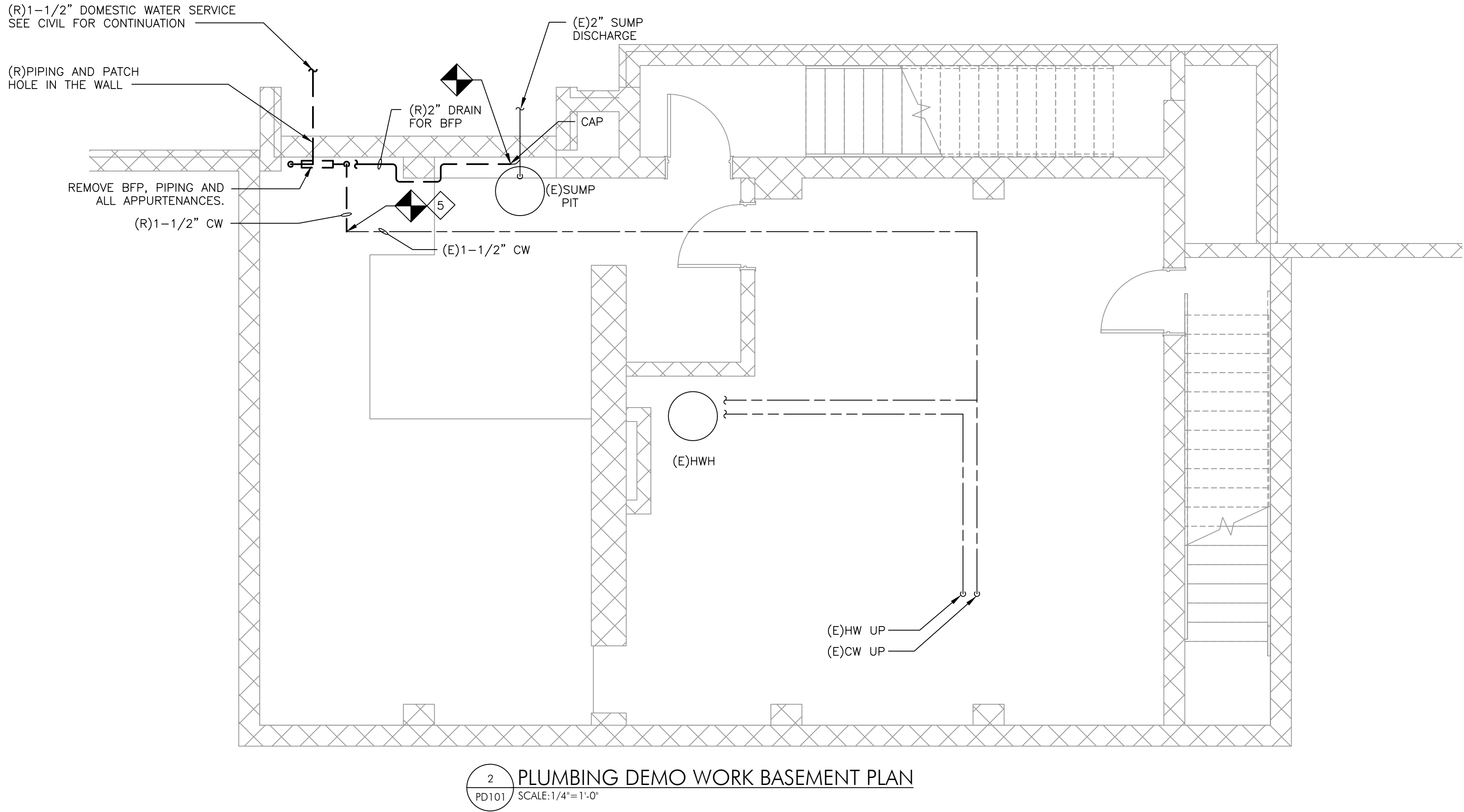
MEPP ENGINEER  
Schiller & Hersh Associates  
636 Skippack Pike, Suite 200  
Blue Bell, PA 19422  
215-886-8947

CIVIL ENGINEER  
Bohler Engineering  
636 Market Street Suite 920  
Philadelphia, PA 19102  
267-402-3400

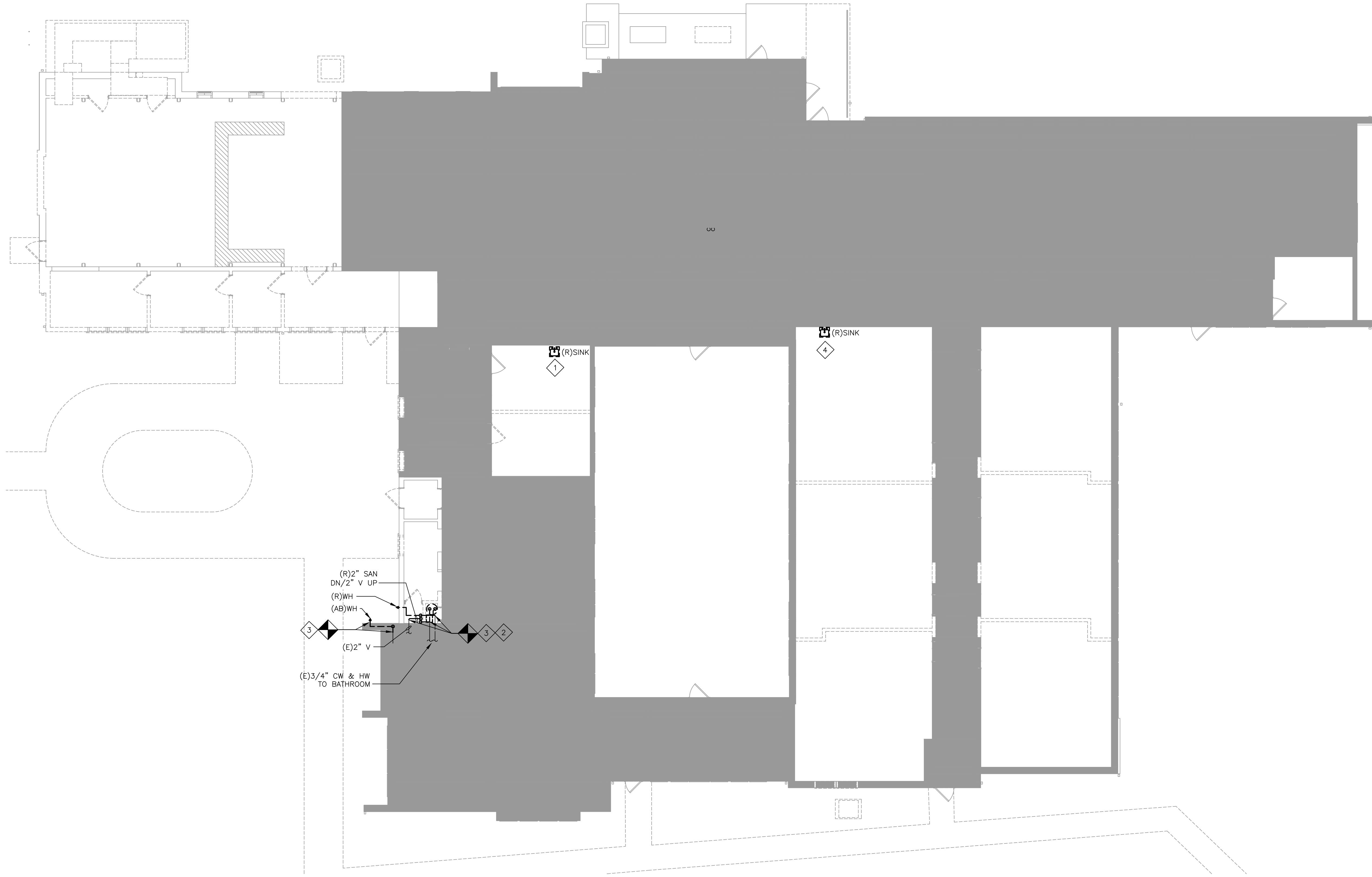
- NOTES:
1. REFER TO DRAWING PD01 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
  2. ALL WORK SHOWN SHALL BE DEMO UNLESS OTHERWISE NOTED.
  3. PC IS RESPONSIBLE FOR DRAINING AND REFILLING THE DOMESTIC WATER SYSTEM WHERE REQUIRED. WHEN FILLING IS TO CYCLE THE HIGHEST FIXTURES TO ASSURE THAT THE REFILL IS NOT AIRBOUND.

NEW WORK PLAN KEY NOTES:

- 1 REMOVE EXISTING FIXTURE INCLUDING FROM FIXTURE TO WALL. REPLACE FIXTURE IN-KIND.
- 2 REMOVE EXISTING SERVICE SINK. REMOVE ALL WATER PIPING AND VALVES. REMOVE VENT PIPING UP TO CEILING AND DISCONNECT FROM EXISTING VENT PIPE. REMOVE SANITARY PIPING DOWN BELOW FLOOR AND CAP. PATCH HOLE IN FLOOR WITH CONCRETE.
- 3 REMOVE EXISTING WATER HEATER, PIPING AND ALL APPURTENANCES. REMOVE WATER PIPING BACK TO A POINT AS SHOWN ON PLAN. EXISTING HOT WATER PIPING WILL BE RECONNECTED TO CAP EXISTING COLD WATER AT MAIN.
- 4 REMOVE EXISTING FIXTURE INCLUDING FROM FIXTURE TO WALL. EXISTING PIPE CONNECTIONS WILL CONNECT TO TWO FIXTURES BEHIND THE CABINET IN THE NEW CONSTRUCTION.
- 5 DISCONNECT THE EXISTING 1-1/2" CW FROM THE WATER SERVICE PIPING BEING REMOVED. 1-1/2" CW WILL BE RECONNECTED TO.
- 6 DISCONNECT WALL HYDRANT FROM EXISTING WATER PIPING AND ABANDON. REMOVE WATER PIPING BACK TO MAIN IN EXISTING BATHROOMS 131 & 132 AND CAP.



2 PLUMBING DEMO WORK BASEMENT PLAN



1 PLUMBING DEMO WORK FLOOR PLAN

| ISSUE HISTORY |            |                    |
|---------------|------------|--------------------|
| Δ             | DATE       | ISSUED FOR         |
|               | 2025-11-26 | DESIGN DEVELOPMENT |
|               | 2024-06-11 | 95% CD ISSUE       |
|               | 2026-10-05 | BD ISSUE           |

SHEET TITLE

PLUMBING DEMO WORK  
FIRST FLOOR PLAN

DRAWING NUMBER

PD101

PROJECT TEAM

CLIENT  
CSL  
345 Lakeside Drive  
Levittown, PA 19054  
215-269-7390

ARCHITECTURAL  
Heckendorn Shiles Architects  
347 East Conestoga Road  
Wayne, PA 19087  
610-994-3500

STRUCTURAL ENGINEER  
AW Lookup Corporation  
500 Fayette St., Suite 100  
Conshohocken, PA 19428  
610-852-2600

MEPP ENGINEER  
Schiller & Hersh Associates  
636 Skipack Pike, Suite 200  
Blue Bell, PA 19422  
215-886-8947

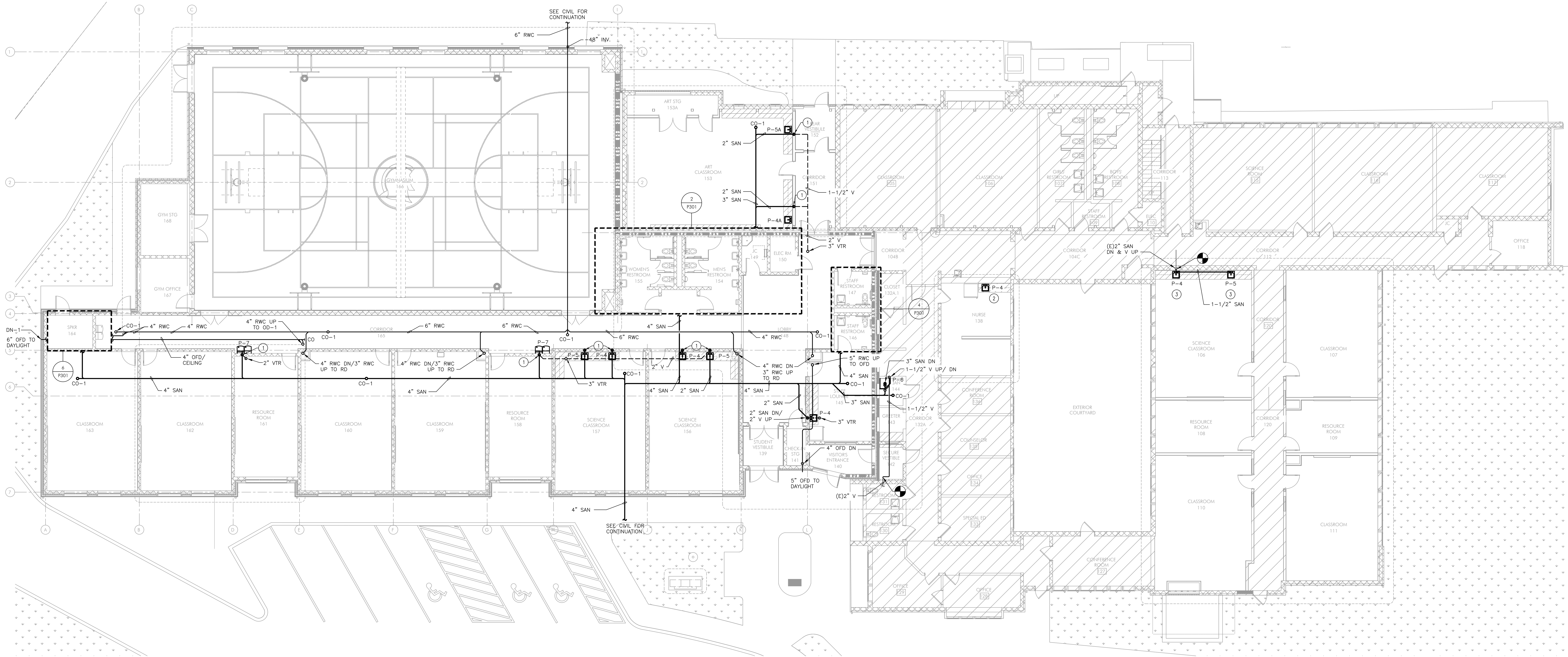
CIVIL ENGINEER  
Bohler Engineering  
636 Market Street Suite 920  
Philadelphia, PA 19102  
267-402-3400

NOTES:

1. REFER TO DRAWING P001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED.
3. PC IS TO INSTALL SANITARY PIPING IN ACCORDANCE WITH THE 2021 IPC (SLOPES).

NEW WORK PLAN KEY NOTES:

- 1 2" SANITARY DOWN, 1-1/2" SANITARY TO FIXTURE, AND 1-1/2" V UP.
- 2 CONNECT FIXTURE TO EXISTING PIPE CONNECTIONS.
- 3 RUN NEW PIPING IN THE SPACE BEHIND THE CABINET FROM NEW SINK TO THE EXISTING PIPE CONNECTIONS. BOTH NEW SINKS IN SCIENCE CLASSROOM 166 WILL CONNECT TO THE EXISTING PIPE CONNECTIONS.



PROJECT TEAM

CLIENT

CSL  
345 Lakeside Drive  
Levittown, PA 19054  
215-269-7390

ARCHITECTURAL

Heckendorn Shiles Architects  
347 East Conestoga Road  
Wayne, PA 19087  
610-994-3500

STRUCTURAL ENGINEER

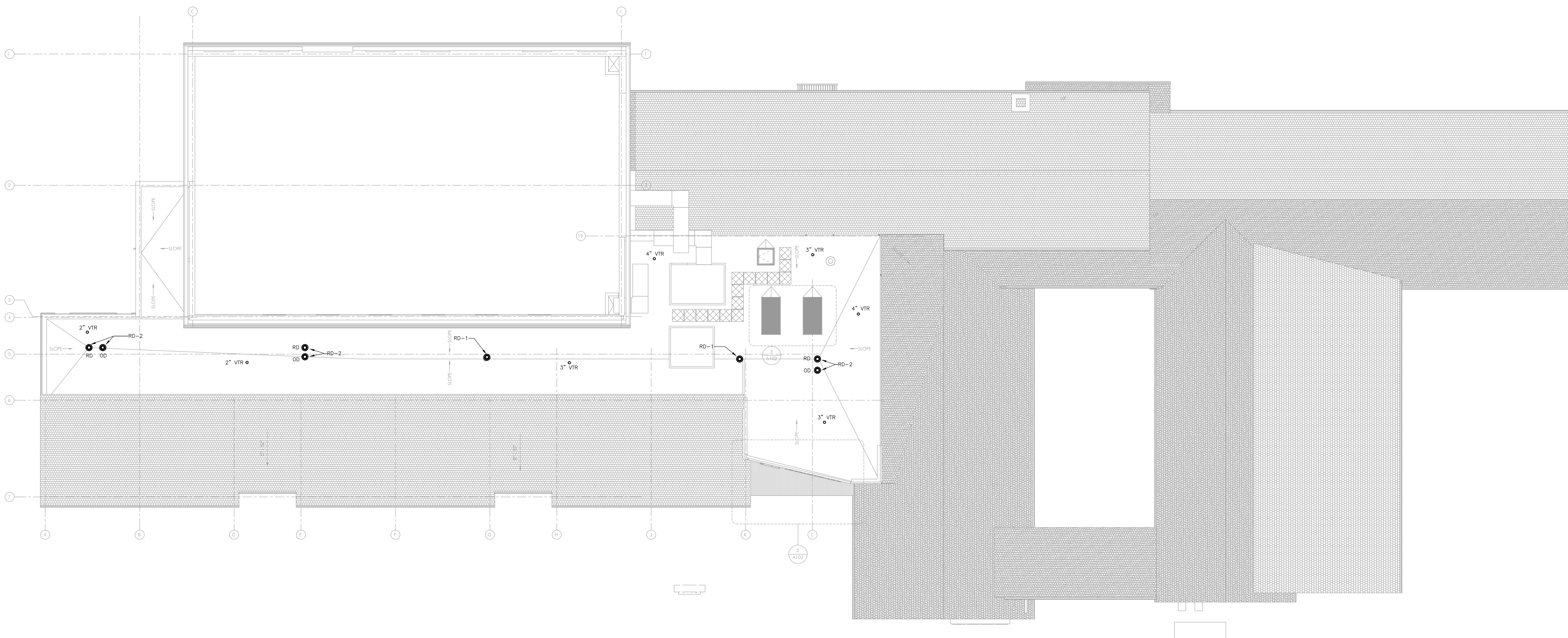
AW Lookup Corporation  
500 Fayette St., Suite 100  
Conshohocken, PA 19428  
610-852-2600

MEPP ENGINEER

Schiller & Hersh Associates  
636 Skipack Pike, Suite 200  
Blue Bell, PA 19422  
215-886-8947

CIVIL ENGINEER

Bohler Engineering  
636 Market Street Suite 920  
Philadelphia, PA 19102  
267-402-3400



1 PLUMBING NEW WORK ROOF PLAN  
P102 SCALE: 1/8" = 1'-0"

ISSUE HISTORY

| Δ | DATE       | ISSUED FOR         |
|---|------------|--------------------|
|   | 2025-11-26 | DESIGN DEVELOPMENT |
|   | 2024-06-11 | 95% CD ISSUE       |
|   | 2026-10-05 | BD ISSUE           |

SHEET TITLE

PLUMBING NEW  
WORK ROOF PLAN

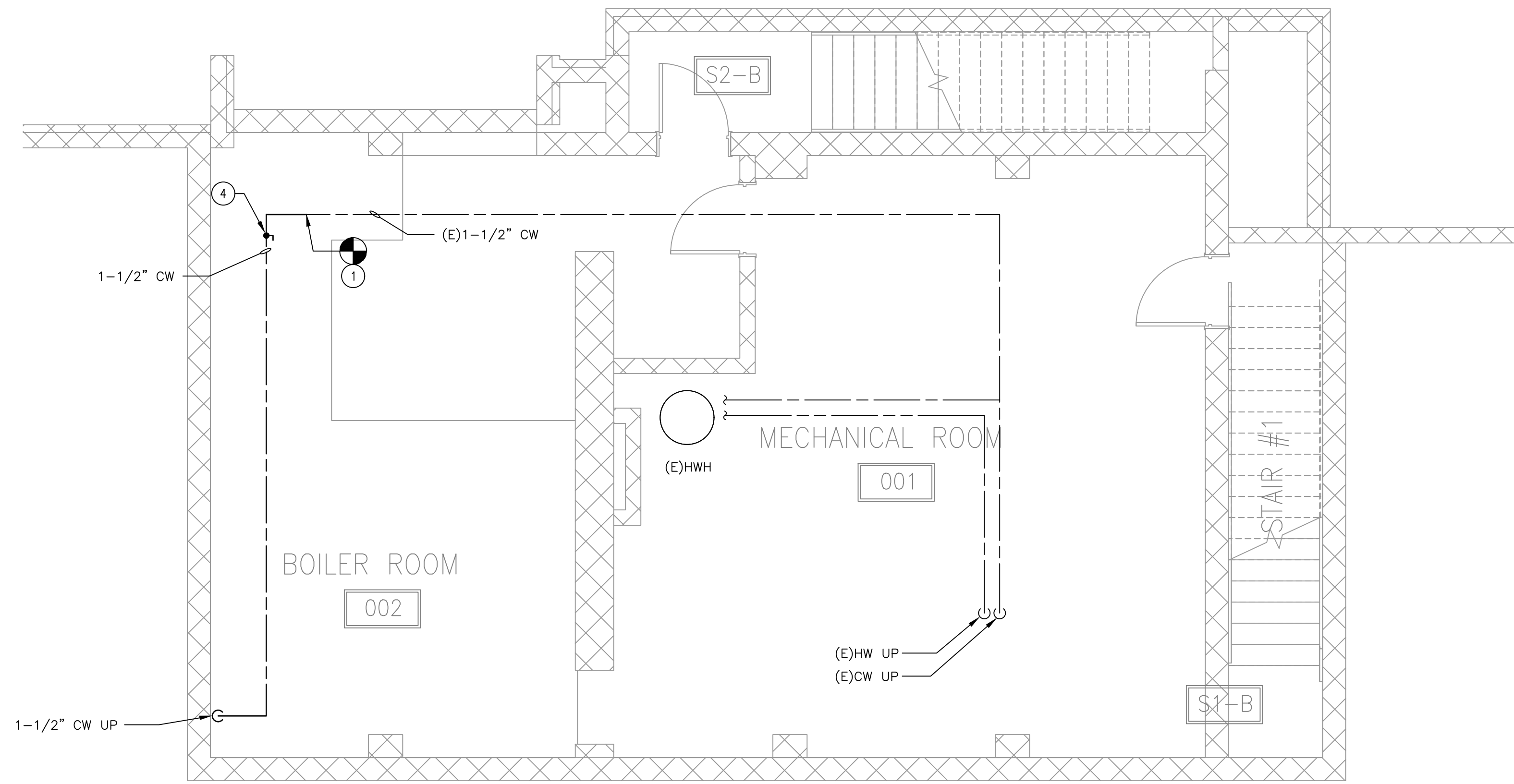
DRAWING NUMBER

P102

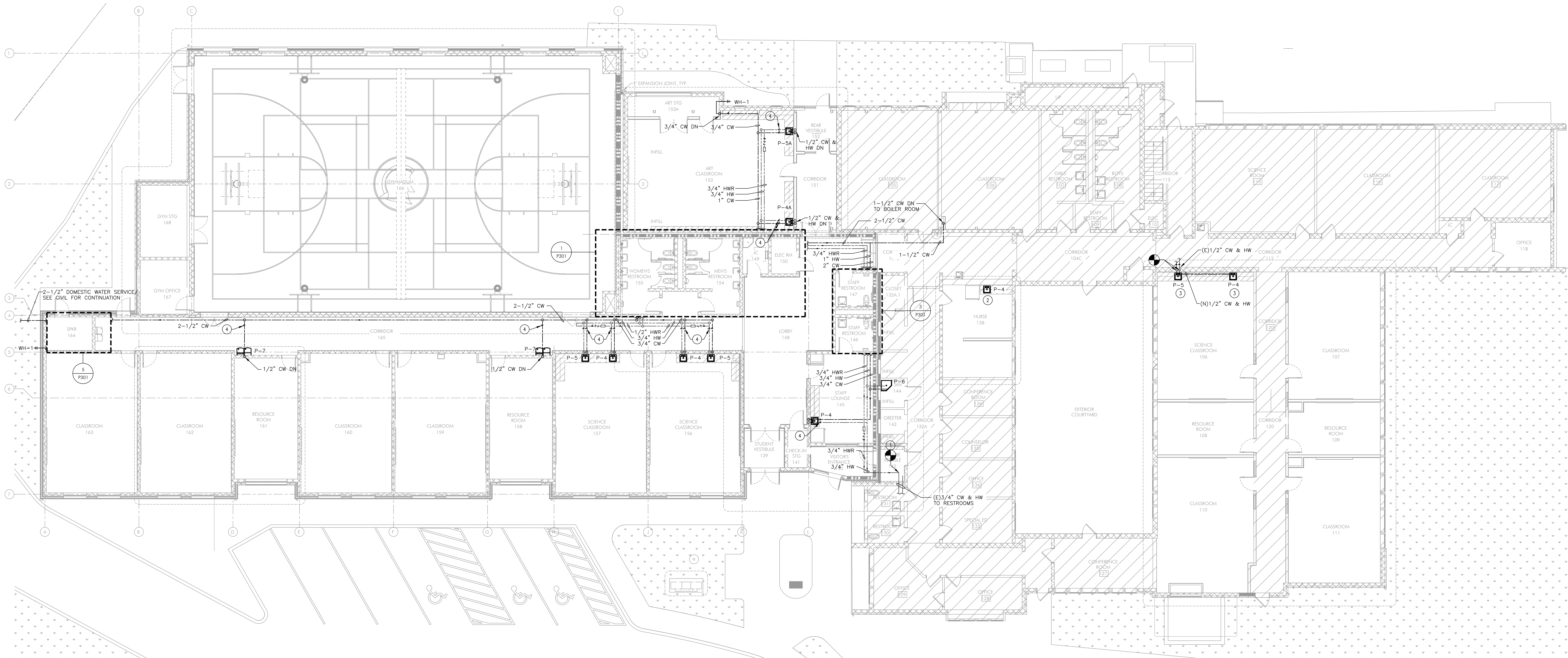
- NOTES:
1. REFER TO DRAWING P001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
  2. ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED.
  3. PROVIDE NEW BALL ISOLATION VALVES ON ALL BRANCH PIPING.

NEW WORK PLAN KEY NOTES:

1. CONNECT NEW WATER PIPING TO EXISTING WATER PIPING.
2. CONNECT FIXTURE TO EXISTING PIPE CONNECTIONS.
3. RUN NEW PIPING IN THE SPACE BEHIND THE CABINET FROM NEW SINK TO THE EXISTING PIPE CONNECTIONS. BOTH NEW SINKS IN SCIENCE CLASSROOM 106 WILL CONNECT TO THE EXISTING WATER PIPE CONNECTIONS.
4. NEW BALL ISOLATION VALVE.



2 DOMESTIC WATER NEW WORK BASEMENT PLAN  
P201 SCALE: 1/4" = 1'-0"



1 DOMESTIC WATER NEW WORK FIRST FLOOR PLAN  
P201 SCALE: 1/8" = 1'-0"

PROJECT TEAM

CLIENT  
CSL  
345 Lakeside Drive  
Levittown, PA 19054  
215-269-7390

ARCHITECTURAL  
Heckendorn Shiles Architects  
347 East Conestoga Road  
Wayne, PA 19087  
610-994-3500

STRUCTURAL ENGINEER  
AW Lookup Corporation  
500 Fayette St., Suite 100  
Conshohocken, PA 19428  
610-852-2600

MEPP ENGINEER  
Schiller & Hersh Associates  
636 Skipack Pike, Suite 200  
Blue Bell, PA 19422  
215-886-8947

CIVIL ENGINEER  
Bohler Engineering  
636 Market Street Suite 920  
Philadelphia, PA 19102  
267-402-3400

ISSUE HISTORY

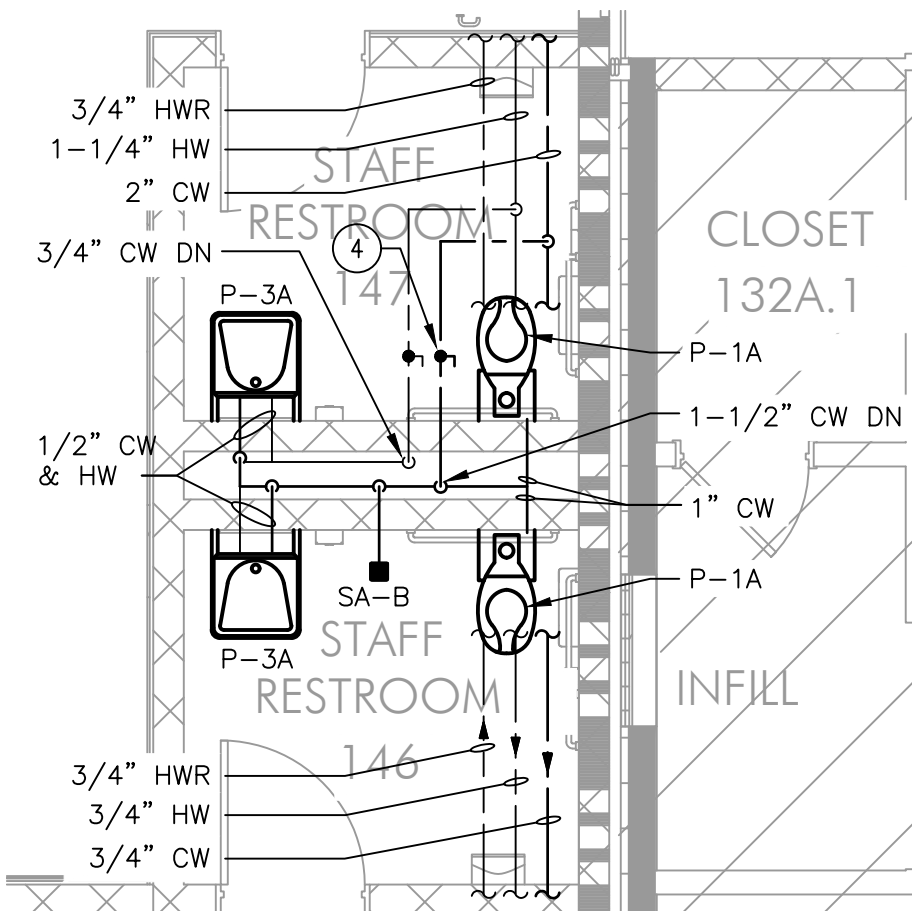
| DATE       | ISSUED FOR         |
|------------|--------------------|
| 2025-11-26 | DESIGN DEVELOPMENT |
| 2024-06-11 | 95% CD ISSUE       |
| 2026-10-05 | BD ISSUE           |

SHEET TITLE

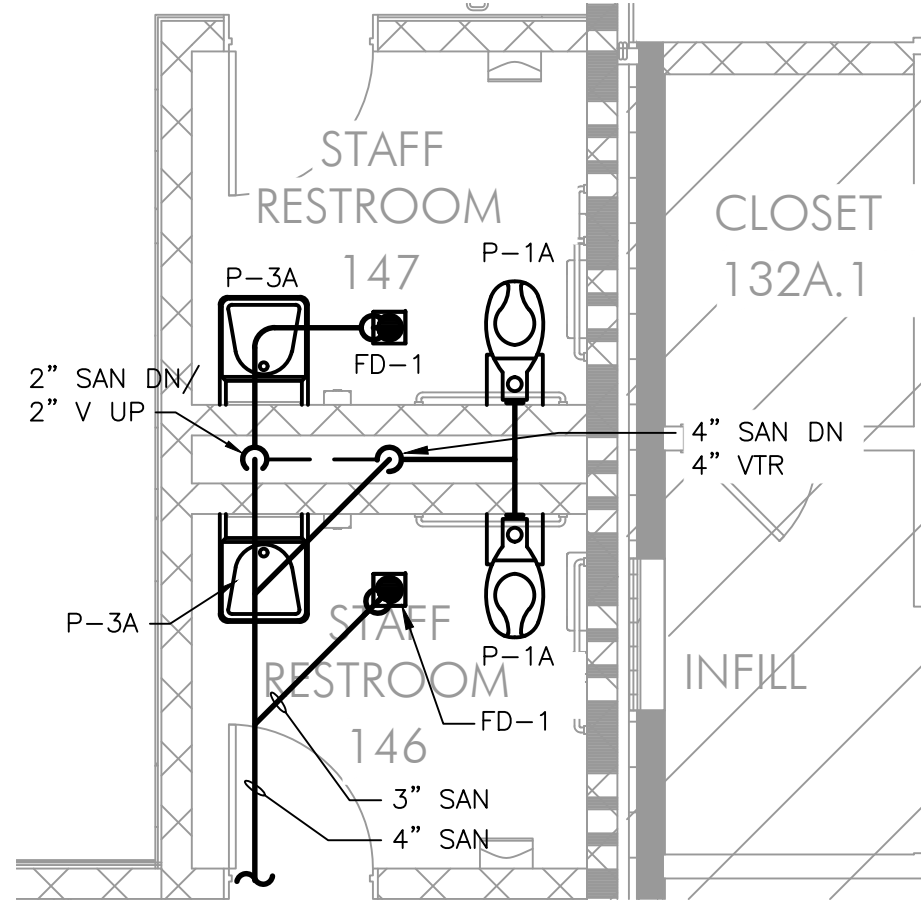
- NOTES:
1. REFER TO DRAWING P001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
  2. ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED.
  3. PROVIDE NEW BALL ISOLATION VALVES ON ALL BRANCH PIPING.

NEW WORK PLAN KEY NOTES:

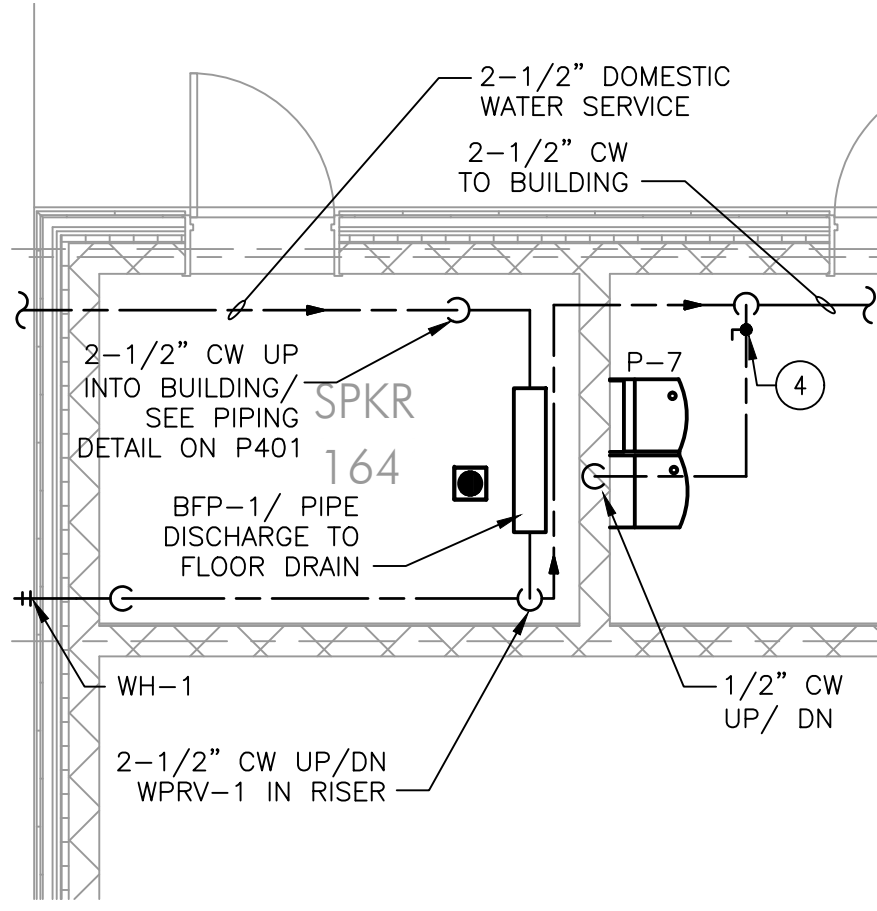
1. CONNECT NEW WATER PIPING TO EXISTING WATER PIPING.
2. CONNECT FIXTURE TO EXISTING PIPE CONNECTIONS.
3. RUN NEW PIPING IN THE SPACE BEHIND THE CABINET FROM NEW SINK TO THE EXISTING PIPE CONNECTIONS. BOTH NEW SINKS IN SCIENCE CLASSROOM 106 WILL CONNECT TO THE EXISTING WATER PIPE CONNECTIONS.
4. NEW BALL ISOLATION VALVE.



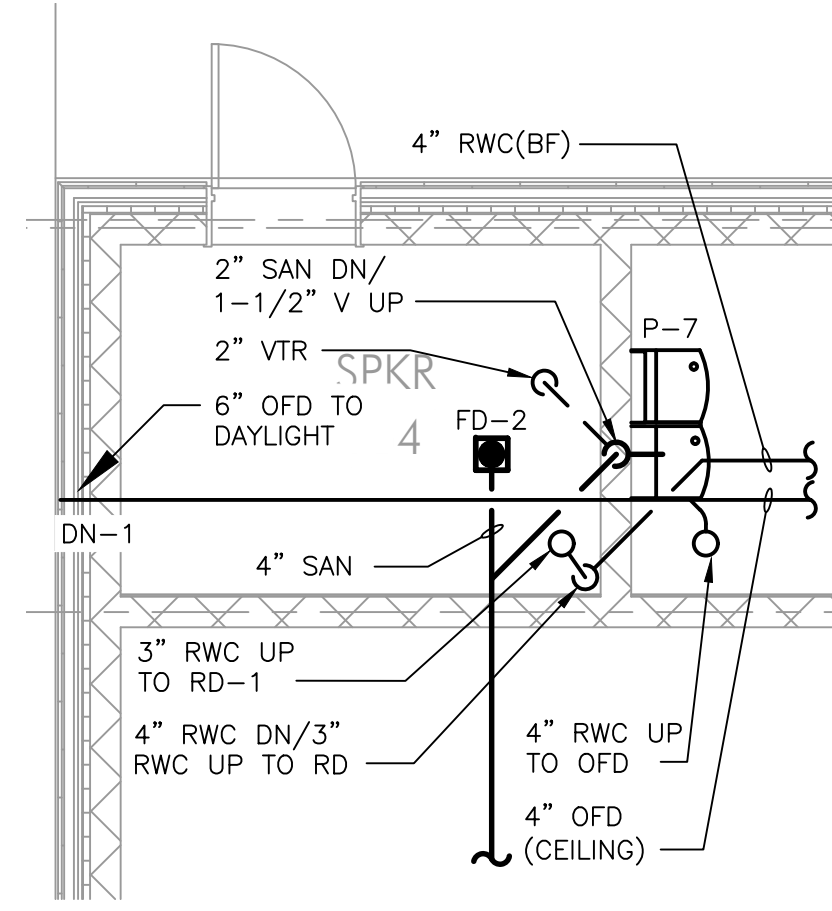
3 DOMESTIC WATER - STAFF RESTROOM 146 & 147  
P301 SCALE: 1/4"=1'-0"



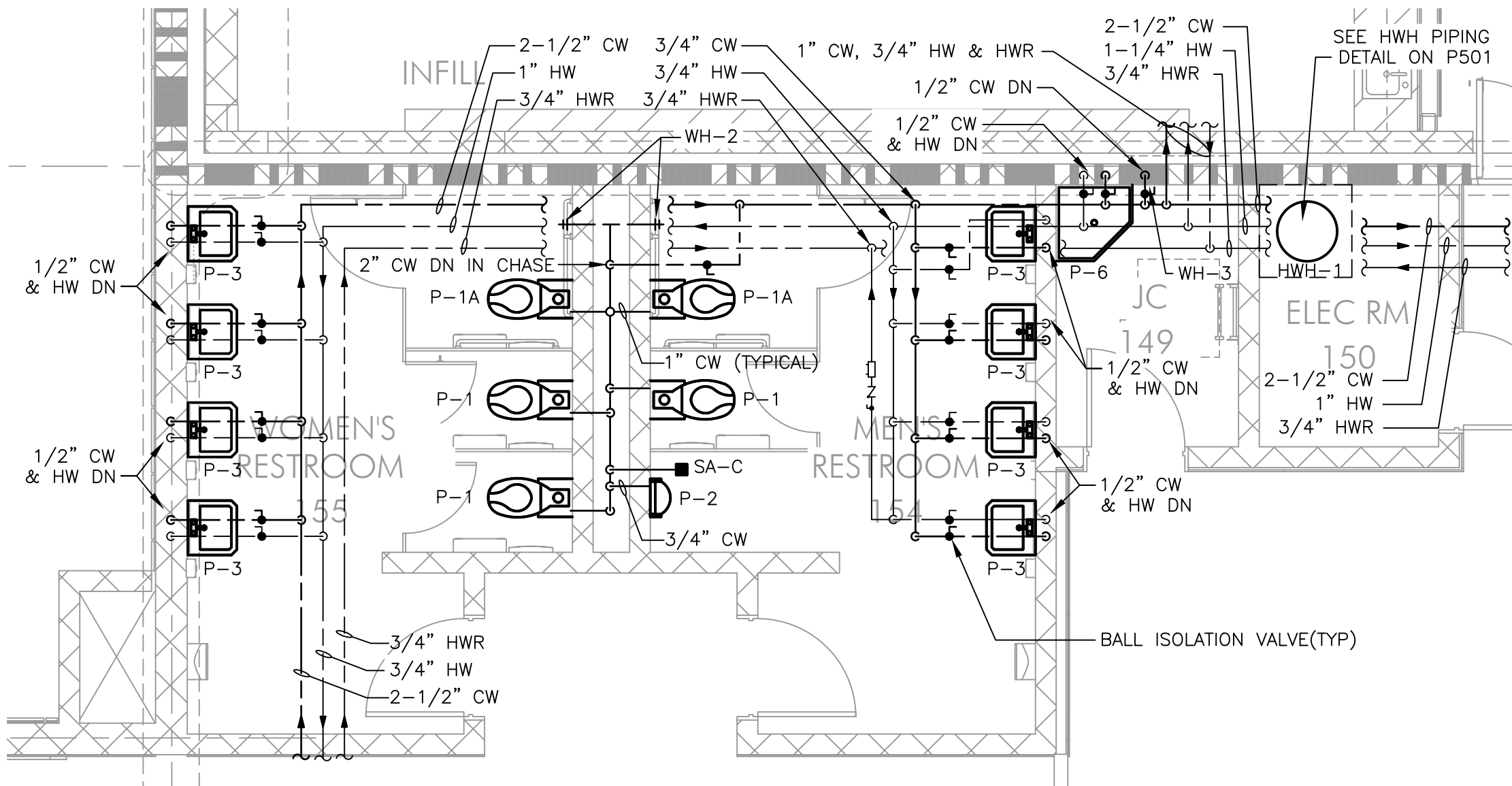
4 SANITARY - STAFF RESTROOM 146 & 147  
P301 SCALE: 1/4"=1'-0"



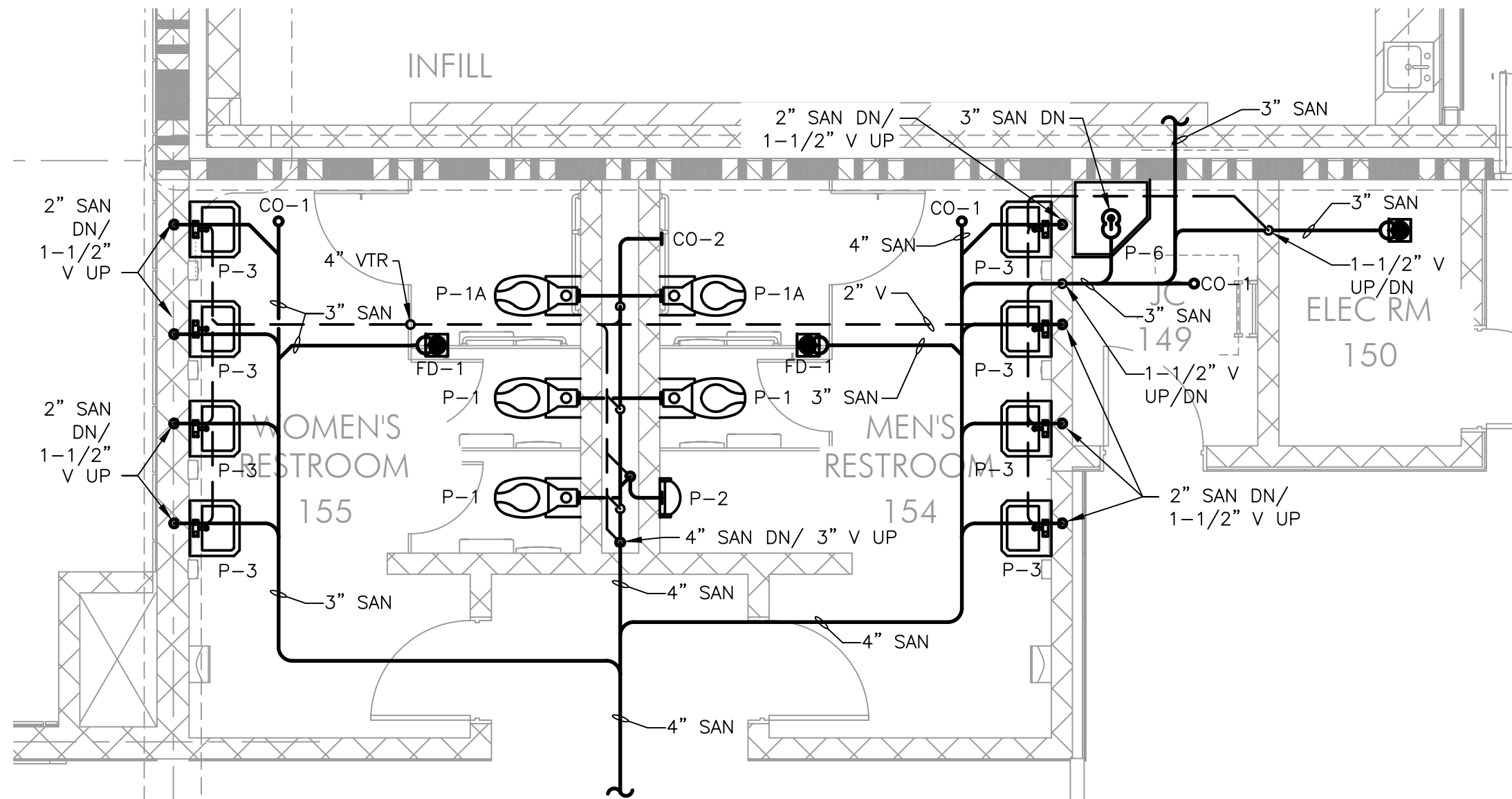
5 DOMESTIC WATER - SPRINKLER 164  
P301 SCALE: 1/4"=1'-0"



6 SANITARY - SPRINKLER 164  
P301 SCALE: 1/4"=1'-0"



1 DOMESTIC WATER - MEN'S 154 & WOMEN'S 155  
P301 SCALE: 1/4"=1'-0"



2 SANITARY - MEN'S 154 & WOMEN'S 155  
P301 SCALE: 1/4"=1'-0"

PROJECT TEAM

CLIENT  
CSL  
345 Lakeside Drive  
Levittown, PA 19054  
215-269-7390

ARCHITECTURAL  
Heckendorn Shiles Architects  
347 East Conestogo Road  
Wayne, PA 19087  
610-994-3500

STRUCTURAL ENGINEER  
AW Lookup Corporation  
500 Fayette St., Suite 100  
Conshohocken, PA 19428  
610-852-2600

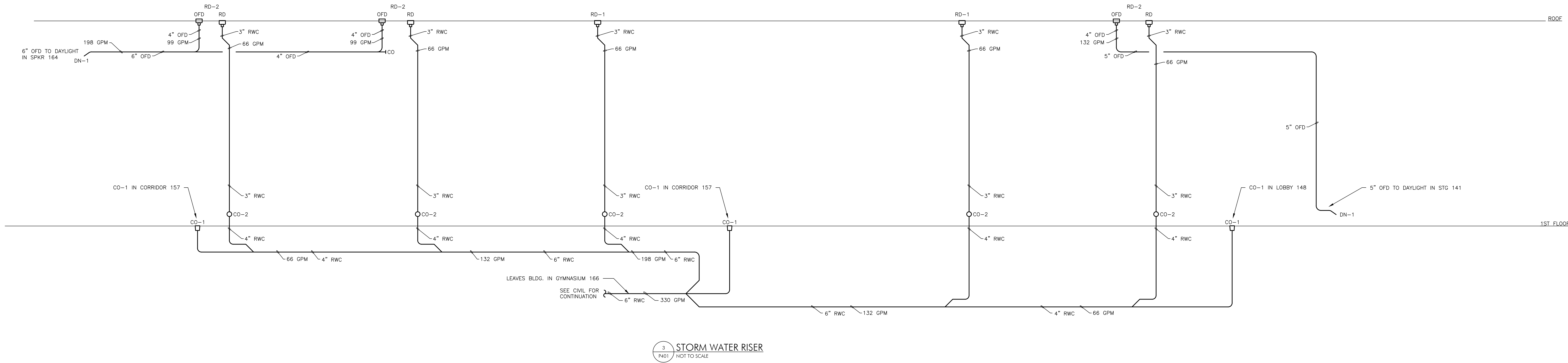
MEPP ENGINEER  
Schiller & Hersh Associates  
636 Skipack Pike, Suite 200  
Blue Bell, PA 19422  
215-886-8947

CIVIL ENGINEER  
Bohler Engineering  
636 Market Street Suite 920  
Philadelphia, PA 19102  
267-402-3400

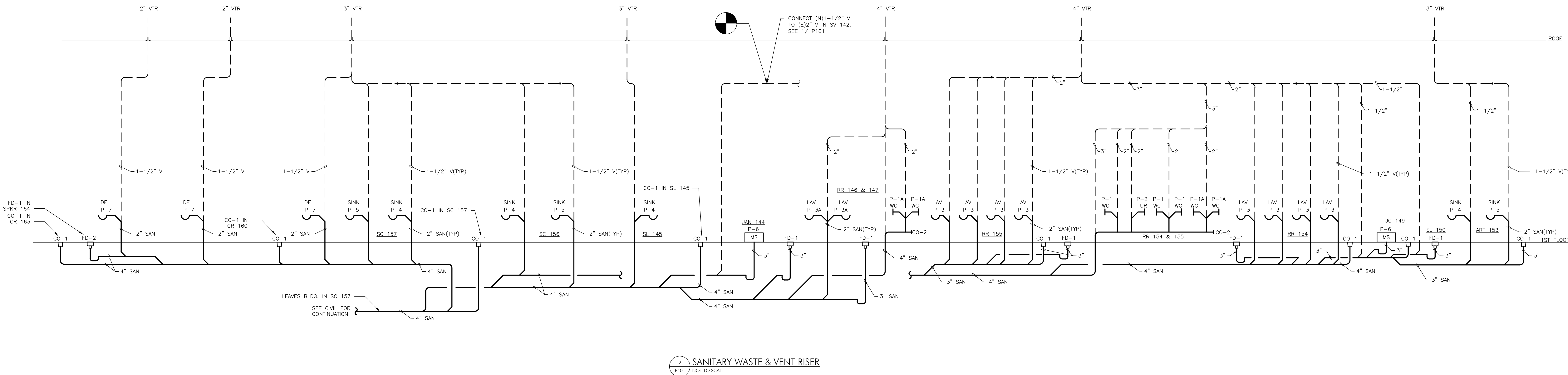
ISSUE HISTORY

| Δ | DATE       | ISSUED FOR         |
|---|------------|--------------------|
|   | 2025-11-26 | DESIGN DEVELOPMENT |
|   | 2024-06-11 | 95% CD ISSUE       |
|   | 2026-10-05 | BD ISSUE           |

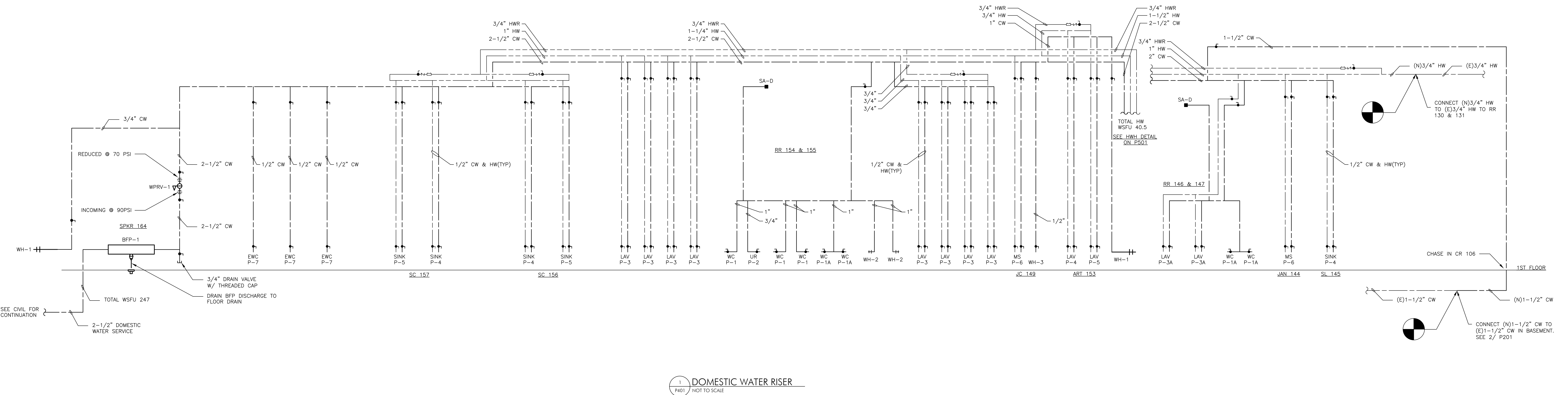
SHEET TITLE



3 STORM WATER RISER  
P401 NOT TO SCALE



2 SANITARY WASTE & VENT RISER  
P401 NOT TO SCALE



1 DOMESTIC WATER RISER  
P401 NOT TO SCALE

| PLUMBING FIXTURE SCHEDULE |                           |          |          |        |        |      |      |                                  |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|---------------------------|----------|----------|--------|--------|------|------|----------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                           | DESCRIPTION               | MOUNTING | TRAP     | DRAIN  | VENT   | CW   | HW   | REMARKS                          | FLOW RATE | MANUFACTURER & MODEL NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| P-1                       | WATER CLOSET              | WALL     | INTEGRAL | 4"     | 2"     | 1"   | —    | WALL HUNG MANUAL FLUSH VALVE     | 1.6 GPF   | AMERICAN STANDARD AFWALL MILLENIUM 1.6 GPF FLOWISE MODEL 3351-101 WITH ELONGATED HEAVY DUTY OPEN FRONT SEAT, COLOR WHITE, LESS COVER. SLOAN REGAL 111 FLUSH VALVE. ZURN WATER CLOSET CARRIER SYSTEM Z1201-ND4 OR Z1201N-4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| P-1A                      | WATER CLOSET              | WALL     | INTEGRAL | 4"     | 2"     | 1"   | —    | ADA WALL HUNG MANUAL FLUSH VALVE | 1.6 GPF   | AMERICAN STANDARD AFWALL MILLENIUM 1.6 GPF FLOWISE MODEL 3351-101 WITH ELONGATED HEAVY DUTY OPEN FRONT SEAT, COLOR WHITE, LESS COVER. SLOAN REGAL 111 FLUSH VALVE. ZURN WATER CLOSET CARRIER SYSTEM Z1201-ND4 OR Z1201N-4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| P-2                       | URINAL                    | WALL     | INTEGRAL | 2"     | 1-1/2" | 3/4" | —    | WALL HUNG MANUAL FLUSH VALVE     | .5 GPF    | AMERICAN STANDARD WASHBROOK FLOWISE MODEL 6500.001. STAINLESS STEEL STRAINER 047068--007DA. SLOAN REGAL 186 FLUSH VALVE. ZURN Z1222 WALL URINAL SUPPORT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| P-3                       | LAVATORY                  | WALL     | "P"      | 1-1/4" | 1-1/2" | 1/2" | 1/2" | ADA/PROTECTIVE SHIELD GUARDS     | .5 GPM    | AMERICAN STANDARD LUCERNE 0355.027. CHICAGO FAUCET 802--VE2805--317ABCP WITH WRISTBLADE HANDLES. ASSE 1070 MIXING VALVE. PROVIDE WITH 12" LONG LAV SUPPLIES, W/ ANGLE STOP, GRID DRAIN & TAILPIECE. TRAP & ESCUTCHEONS, PLUMBEREX SPECIALTY PRODUCTS HANDY-SHIELD COVERS. ZURN 1231-EZ LAVATORY SUPPORT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| P-3A                      | LAVATORY                  | WALL     | "P"      | 1-1/4" | 1-1/2" | 1/2" | 1/2" | ADA/PROTECTIVE SHIELD GUARDS     | .5 GPM    | AMERICAN STANDARD LAVATORY 0141.011. CHICAGO FAUCET 802--VE2805--317ABCP WITH WRISTBLADE HANDLES. ASSE 1070 MIXING VALVE. PROVIDE WITH 12" LONG LAV SUPPLIES, W/ ANGLE STOP, GRID DRAIN & TAILPIECE. TRAP & ESCUTCHEONS, PLUMBEREX SPECIALTY PRODUCTS HANDY-SHIELD COVERS. ZURN 1231-EZ LAVATORY SUPPORT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| P-4                       | CLASS ROOM SINK           | DROP-IN  | "P"      | 1-1/2" | 1-1/2" | 1/2" | 1/2" | ADA MANUAL                       | 1.5 GPM   | ELKAY LUSTERTONE LRAD191855 SINGLE BOWL DROP-IN SINK, ADA COMPLIANT, 18 GAUGE SS, 5-1/2" DEEP. CHICAGO 1100-G2AE35VP317AB-1.5GPM WITH GOOSENECK SPOUT AND WRISTBLADE HANDLES. ASSE 1070 MIXING VALVE. SS STRAINER BASKET WITH RUBBER STOPPER AND 1-1/2" SS TAILPIECE. TRAP & ESCUTCHEONS. CHROME PLATED STOPS WITH HEAVY FLEXIBLE CHROME PLATED SUPPLY RISERS.                                                                                                                                                                                                                                                                                                                                                                                                                                |
| P-4A                      | CLASS ROOM SINK (SCIENCE) | DROP-IN  | "P"      | 1-1/2" | 1-1/2" | 1/2" | 1/2" | ADA MANUAL                       | 1.5 GPM   | ELKAY LUSTERTONE LRAD191855 SINGLE BOWL DROP-IN SINK, ADA COMPLIANT, 18 GAUGE SS, 5-1/2" DEEP. CHICAGO 1100-G2AE35VP317AB-1.5GPM WITH GOOSENECK SPOUT AND WRISTBLADE HANDLES. ASSE 1070 MIXING VALVE. SS STRAINER BASKET WITH RUBBER STOPPER AND 1-1/2" SS TAILPIECE. TRAP & ESCUTCHEONS. STREIM SIDE KICK SIDE ACCESS SOLID INTERCEPTOR. CHROME PLATED STOPS WITH HEAVY FLEXIBLE CHROME PLATED SUPPLY RISERS.                                                                                                                                                                                                                                                                                                                                                                                |
| P-5                       | CLASS ROOM SINK           | DROP-IN  | "P"      | 1-1/2" | 1-1/2" | 1/2" | 1/2" | MANUAL                           | 1.5 GPM   | ELKAY LUSTERTONE DLR191910 SINGLE BOWL DROP-IN SINK, ADA COMPLIANT, 18 GAUGE SS, 10" DEEP. CHICAGO 1100-G2AE35VP317AB-1.5GPM WITH GOOSENECK SPOUT AND WRISTBLADE HANDLES. ASSE 1070 MIXING VALVE. SS STRAINER BASKET WITH RUBBER STOPPER AND 1-1/2" SS TAILPIECE. TRAP & ESCUTCHEONS. CHROME PLATED STOPS WITH HEAVY FLEXIBLE CHROME PLATED SUPPLY RISERS.                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| P-5A                      | CLASS ROOM SINK           | DROP-IN  | "P"      | 1-1/2" | 1-1/2" | 1/2" | 1/2" | MANUAL                           | 1.5 GPM   | ELKAY LUSTERTONE DLR191910 SINGLE BOWL DROP-IN SINK, ADA COMPLIANT, 18 GAUGE SS, 10" DEEP. CHICAGO 1100-G2AE35VP317AB-1.5GPM WITH GOOSENECK SPOUT AND WRISTBLADE HANDLES. ASSE 1070 MIXING VALVE. SS STRAINER BASKET WITH RUBBER STOPPER AND 1-1/2" SS TAILPIECE. TRAP & ESCUTCHEONS. STREIM SIDE KICK SIDE ACCESS SOLID INTERCEPTOR. CHROME PLATED STOPS WITH HEAVY FLEXIBLE CHROME PLATED SUPPLY RISERS.                                                                                                                                                                                                                                                                                                                                                                                    |
| P-6                       | MOP RECEPTOR              | FLOOR    | "P"      | 3"     | 2"     | 1/2" | 1/2" | —                                | —         | PROVIDE FLAT MODEL TSBCR1000 28X28X12 TERRAZZO MOP BASIN WITH BLACK AND WHITE MARBLE CHIPS IN GRAY PORTLAND CEMENT TO PRODUCE A COMPRESSIVE STRENGTH NOT LESS THAN 3,000 PSI SEVEN DAYS AFTER CASTING. PROVIDE CHICAGO FAUCET 449-VBRKRCRF, 8" CENTERS WITH HOSE THREAD OUTLET, INTEGRAL STOPS AND VACUUM BREAKER. HOSE AND HOSE BRACKET F412-352-A-AL. F412 MOP HANGER 889-CC.                                                                                                                                                                                                                                                                                                                                                                                                               |
| P-7                       | WATER COOLER/ BI-LEVEL    | WALL     | "P"      | 1-1/2" | 1-1/2" | 1/2" | —    |                                  |           | ELKAY ENHANCED EZH2O BOTTLE FILLING STATION WITH WITH BI-LEVEL ADA COOLER FILTERED REFRIGERATED STAINLESS STEEL MODEL LZSLBWSSP. CHILLING CAPACITY OF 8.0 GPM (GALLONS PER HOUR) OF 50°F DRINKING WATER, BASED ON 80°F INLET WATER AND 90°F AMBIENT. FEATURES SHALL INCLUDE ANTIMICROBIAL*, AUTOMATIC FILTER STATUS RESET, ENERGY SAVINGS, FILTERED, GREEN TICKET™, HANDS FREE, LAMINAR FLOW, REAL DRAIN, VISUAL FILTER MONITOR, FURNISHED WITH FLEX-GUARD® SAFETY BUBBLER. ELECTRONIC BOTTLE FILLER SENSOR WITH ELECTRONIC FRONT AND SIDE BUBBLER PUSHBAR ACTIVATION. PRODUCT SHALL BE WALL MOUNT (ON WALL), FOR INDOOR APPLICATIONS, SERVING 2 STATION(S). UNIT SHALL BE CERTIFIED TO UL 399 AND CAN/CSA C22.2 NO. 120. 115V/18/60HZ. PROVIDE LKAPREZL CANE APRON & MLP200 IN-WALL CARRIER. |

| DRAIN AND SPECIALTY SCHEDULE |                  |          |         |                                                                                                                                                                                                                                                                                                         |
|------------------------------|------------------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NO.                          | DESCRIPTION      | MOUNTING | REMARKS | MANUFACTURER & MODEL NUMBER                                                                                                                                                                                                                                                                             |
| FD-1                         | FLOOR DRAIN      | FLOOR    | —       | ZURN Z415B FLOOR AND SHOWER DRAIN, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS AND "TYPE B" POLISHED NICKEL BRONZE, LIGHT DUTY HEEL PROOF STRAINER, Z1072 ZSHIELD BARRIER TRAP SEAL DEVICE.                           |
| FD-2                         | FLOOR DRAIN      | FLOOR    | —       | ZURN Z505 12-1/4" DIAMETER TOP DRAIN, DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, SEEPAGE PAN AND COMBINATION MEMBRANE FLASHING CLAMP AND FRAME WITH INTEGRATED TRAP PRIMER AND PLUG FOR HEAVY-DUTY DEEP FLANGE SLOTTED DURESIST GRATE WITH SEDIMENT BUCKET. Z1072 ZSHIELD BARRIER TRAP SEAL DEVICE. |
| CO-1                         | CLEAN OUT        | FLOOR    | —       | ZURN Z1400-BZ1 FLOOR CLEANOUT, DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, WITH GAS AND WATER TIGHT THREADED ABS PLUG, AND TOP ASSEMBLY.                                                                                                                                                             |
| CO-2                         | CLEAN OUT        | WALL     | —       | ZURN Z1468 ACCESS COVER AND PLUG WITH SECURING SCREW AND BRONZE RAISED HEX HEAD PLUG.                                                                                                                                                                                                                   |
| RD-1                         | ROOF DRAIN       | DECK     | —       | ZURN Z100 15" DIAMETER ROOF DRAIN, DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE CLAMP/GRAVEL GUARD, DECK PLATE, AND LOW SILHOUETTE POLY-DOME.                                                                                                                                                   |
| RD-2                         | ROOF DRAIN       | DECK     | —       | ZURN Z163 15" DIAMETER ROOF DRAIN AND OVERFLOW DRAIN, DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARD, DOUBLE DECK PLATE, AND LOW SILHOUETTE POLY-DOMES.                                                                                                               |
| DN-1                         | DOWNSPOUT NOZZLE | WALL     | —       | ZURN ZF199 CHAMELEON DOWNSPOUT NOZZLE WITH FLAPPER, ALL ALUMINUM BODY AND DOWNSPOUT BASKET FOR CAST IRON INLET WITH POWDER COATED FACE OF WALL FLANGE, OUTLET NOZZLE, AND PERFORATED HINGED FLAPPER.                                                                                                    |

| WALL HYDRANTS |                                     |            |                 |          |          |              |
|---------------|-------------------------------------|------------|-----------------|----------|----------|--------------|
| NO.           | DESCRIPTION                         | MODEL      | FINISH          | INLET    | OUTLET   | MANUFACTURER |
| WH-1          | ECOLOTROL CERAMIC DISC WALL HYDRANT | Z1320XL    | SS              | 3/4" MPT | 3/4" MHT | ZURN         |
| WH-2          | ECOLOTROL WALL HYDRANT              | Z1334-C    | POLISHED CHROME | 1/2" FPT | 3/4" MHT | ZURN         |
| WH-3          | WALL FAUCET                         | Z1341XL-PC | POLISHED CHROME | 3/4" FPT | 3/4" MHT | ZURN         |

| SHOCK ABSORBER SCHEDULE<br>ASSE 1010 |                 |
|--------------------------------------|-----------------|
| TAG NO.                              | FIXTURE UNITS * |
| SA-A                                 | 1 — 11          |
| SA-B                                 | 12 — 32         |
| SA-C                                 | 33 — 60         |
| SA-D                                 | 61 — 113        |
| SA-E                                 | 114 — 154       |

\* FIXTURE UNIT VALUES ARE BASED ON THE PLUMBING DRAINAGE INSTITUTE "STANDARD P.D.I. WH-201"

| DOMESTIC ELECTRIC WATER HEATER SCHEDULE |              |                        |                          |                   |                       |       |       |                 |                     |                 |                    |
|-----------------------------------------|--------------|------------------------|--------------------------|-------------------|-----------------------|-------|-------|-----------------|---------------------|-----------------|--------------------|
| WH NO.                                  | AREA SERVED  | RATED NOMINAL CAPACITY | DOE RATED STORAGE VOLUME | FIRST HOUR RATING | UNIFORM ENERGY FACTOR | VOLTS | PHASE | ELEMENT WATTAGE | GF/H RECOVERY @100" | MAX DIM         | AO SMITH MODEL NO. |
| HWH-1                                   | NEW ADDITION | 50 GAL                 | 45                       | 189               | 0.92                  | 208   | 3     | 6,000           | 148                 | 21.75" x 55.75" | DRE-52A-36         |

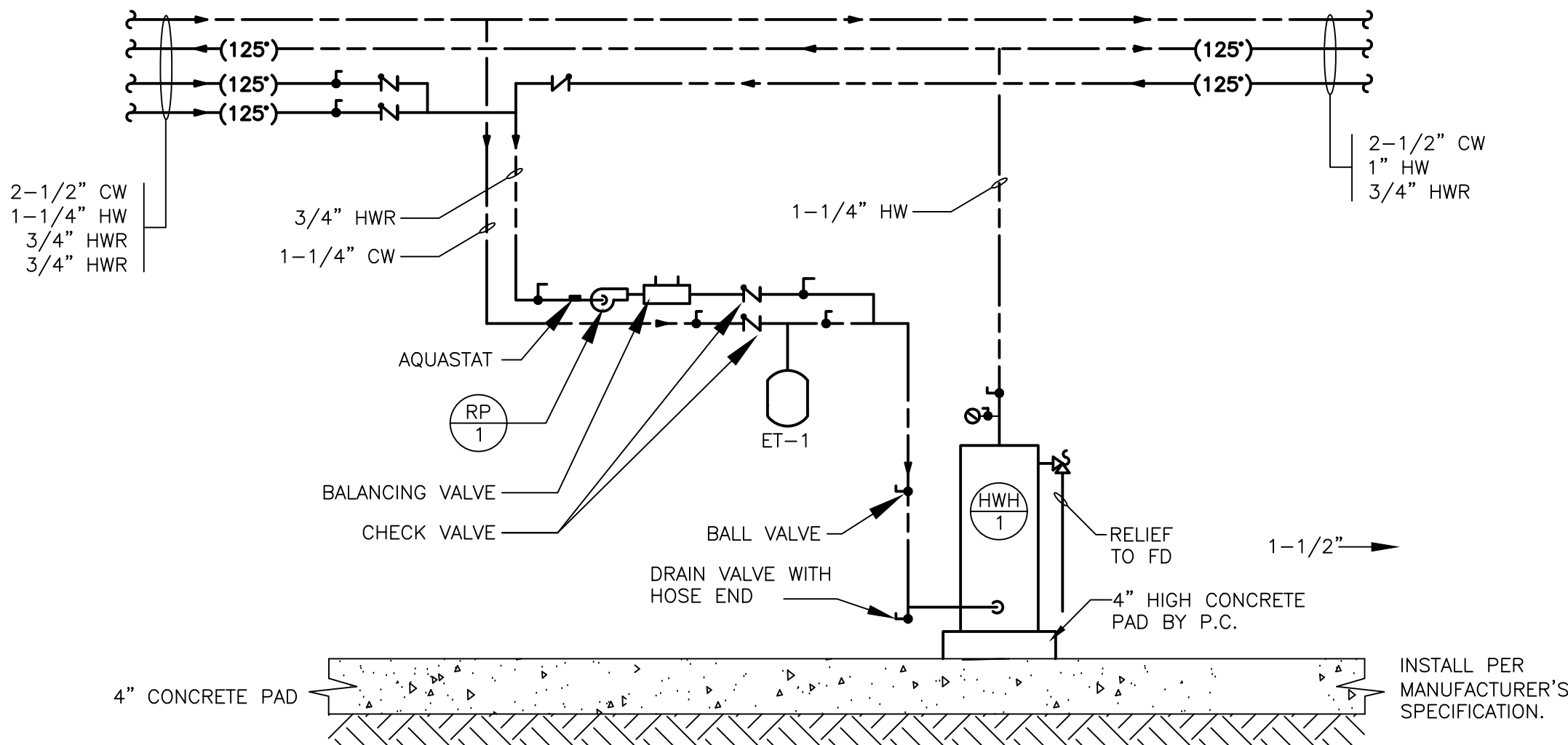
| PUMP SCHEDULE |             |     |                  |      |      |                   |       |       |         |           |
|---------------|-------------|-----|------------------|------|------|-------------------|-------|-------|---------|-----------|
| PP NO.        | SERVICE     | GPM | HEAD PRESSURE FT | RPM  | H.P. | ELEC. CHAR. PHASE | VOLTS | CYCLE | TYPE    | MAX. DIM. |
| RP-1          | DHW RECIRC. | 11  | 9.5              | 3250 | 1/40 | 115               | 1     | 60    | IN LINE | 5.25 x 6  |

\* RECIRCULATION PUMP TO BE SUITABLE FOR POTABLE WATER SYSTEM.

| EXPANSION TANK |                |             |            |                                      |
|----------------|----------------|-------------|------------|--------------------------------------|
| NO.            | DESCRIPTION    | TANK VOLUME | CONNECTION | MANUFACTURER & MODEL NUMBER          |
| ET-1           | EXPANSION TANK | 2 GAL       | 3/4" NPTM  | AMTROL THERMO-X--TROL MODEL ST-5C-DD |

| BACKFLOW PREVENTER |                    |         |                          |                                                |
|--------------------|--------------------|---------|--------------------------|------------------------------------------------|
| NO.                | DESCRIPTION        | MODEL   | INLET/ OUTLET SIZE (IN.) | BASIS OF DESIGN MANUFACTURER* AND MODEL NUMBER |
| BFP-1              | BACKFLOW PREVENTER | 375-FSC | 2-1/2"                   | ZURN 375 REDUCED PRESSURE PRINCIPLE ASSEMBLY.  |

| WATER PRESSURE REDUCING VALVE |                               |                          |                   |                  |                          |                                                |
|-------------------------------|-------------------------------|--------------------------|-------------------|------------------|--------------------------|------------------------------------------------|
| NO.                           | DESCRIPTION                   | MAXIMUM WORKING PRESSURE | INCOMING PRESSURE | REDUCED PRESSURE | INLET/ OUTLET SIZE (IN.) | BASIS OF DESIGN MANUFACTURER* AND MODEL NUMBER |
| WPRV-1                        | WATER PRESSURE REDUCING VALVE | 200 PSI                  | 90 PSI            | 70 PSI           | 2-1/2"                   | ZURN 500XL3 WATER PRESSURE REDUCING VALVE      |



ELECTRIC WATER HEATER PIPING DETAIL

PROJECT TEAM

CLIENT  
CSL  
345 Lakeside Drive  
Levittown, PA 19054  
215-269-7390

ARCHITECTURAL  
Heckendorn Shiles Architects  
347 East Conestoga Road  
Wayne, PA 19087  
610-994-3500

STRUCTURAL ENGINEER  
AW Lookup Corporation  
500 Fayette St., Suite 100  
Conshohocken, PA 19428  
610-852-2600

MEPPF ENGINEER  
Schiller & Hersh Associates  
636 Skippack Pike, Suite 200  
Blue Bell, PA 19422  
215-886-8947

CIVIL ENGINEER  
Bohler Engineering  
636 Market Street Suite 920  
Philadelphia, PA 19102  
267-402-3400

ISSUE HISTORY

| Δ | DATE       | ISSUED FOR         |
|---|------------|--------------------|
|   | 2025-11-26 | DESIGN DEVELOPMENT |
|   | 2024-06-11 | 95% CD ISSUE       |
|   | 2026-10-05 | BD ISSUE           |

SHEET TITLE