**THIS MUST BE FILLED OUT BEFORE MANUFACTURING BEGINS**

**GENERAL DESIGN NOTES:**

1. STRENGTH DESIGN METHOD: A.W. ACI 318
2. APPLICABLE DESIGN CODES:
   - ACI 318 (MAIN DESIGN SPECIFICATION)
   - ASTM C93 (PRODUCT SPECIFICATION)
   - ASTM C690 (LOADING SPECIFICATION)
3. PRECAST RATED FOR H520 LIVE LOAD IN IMPACT A.W. AASHTO SPECIFICATION
4. DESIGN FILL RANGE = 0 (MIN) TO 3 (MAX)
5. GROUND WATER TABLE FOR STRUCTURAL CALCULATIONS IS BASED ON GROUND WATER TABLE AT 9'-0" BELOW GRADE. IF DESIGN OR ACTUAL WATER TABLE IS LESS THAN ASSUMED, REVIEWING ENGINEER/OWNER SHALL NOTIFY OLDCASTLE PRECAST, INC., UPON REVIEW OF THIS SUBMITTAL.
6. LATERAL DESIGN PRESSURES:
   - EQUIV DRY SOIL FLOW PRESSURE = 47 PSF
   - EQUIV SATURATED SOIL FLOW PRESSURE = 85 PSF
   - LIVE LOAD SURCHARGE PRESSURE = Z
7. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS = 4,000 PSI
8. REINFORCEMENT: ASTM A615, GRADE 60
9. JOINT SEALANT: BUTYL RUBBER, SS-2100/210
10. THESE CALCULATIONS DO NOT INCLUDE ANY LATERAL OR SURCHARGE LOADS PRODUCED BY OTHER FOOTINGS OR FOUNDATIONS ADJACENT TO THIS STRUCTURE, THE STRUCTURE SHALL BE KEPT A MINIMUM OF 1:1 RATIO AWAY FROM OTHER FOOTINGS OR FOUNDATIONS.

**NOTES TO CONTRACTOR:**

1. PLEASE VERIFY ALL SIZES, LOCATIONS, AND ELEVATIONS OF OPENINGS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER COORDINATION TO ENSURE THAT AN ADEQUATE BEARING SURFACE IS PROVIDED (IE. LEVEL AND COMPACTED) PER PROJECT SPECIFICATIONS AND DRAWINGS.
3. AFTER PIPES ARE INSTALLED IN BLOCKOUTS, ALL ANNULAR SPACES SHALL BE FILLED WITH A MIN. OF 3,000 PSI CONCRETE, TO THE UNDERSIDE OF UPPER SECTION FOR FULL THICKNESS OF VAULT WALL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO SUPPLY AND INSTALL ALL PIPING AND SAMPLING TEES.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO FILL WITH CLEAN WATER PRIOR TO "START-UP" OF SYSTEM.
6. STRUCTURE IS NOT DESIGNED FOR INTERNAL WATER PRESSURE PRIOR TO BACKFILL. THE CONTRACTOR SHALL BACKFILL STRUCTURE PRIOR TO TESTING OR PLACING IN SERVICE.

**NOTES TO REVIEWING ENGINEER:**

1. DESIGN, AS SHOWN HEREIN, IS APPLICABLE ONLY TO STRUCTURAL PERFORMANCE OF PRECAST, CAPACITY (GALLONS) SHALL BE DETERMINED BY OTHERS BASED ON SPECIFIC PROJECT REQUIREMENTS.