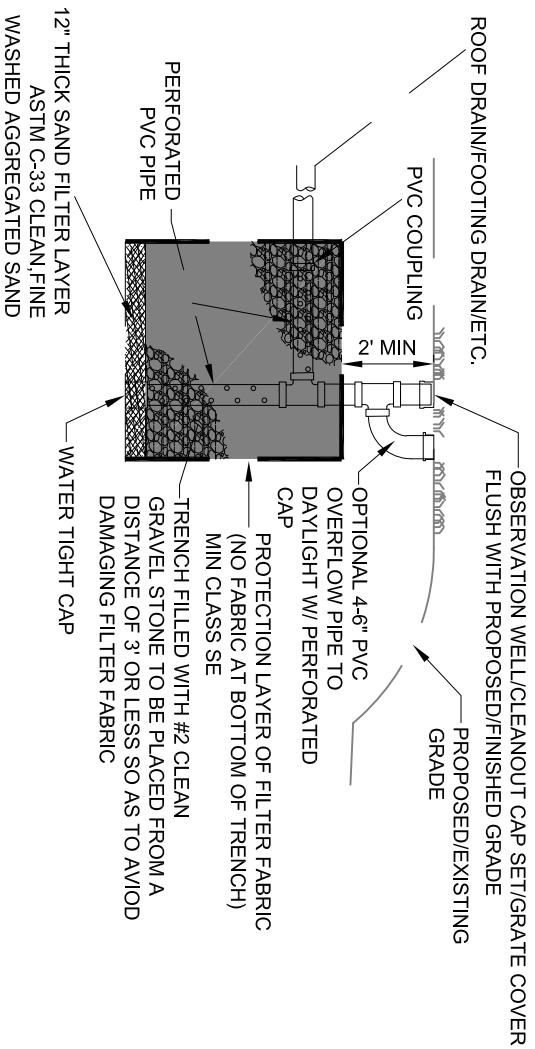


OBSERVATION WELL CLEANOUT CAP DETAIL



STANDARD DRY WELL DETAIL

N.T.S.

- NOTES / SIZING CRITERIA:**
1. DRY WELLS SHOULD BE SIZED TO STORE THE FIRST 1 INCH OF RAIN.
 2. ASSUME THAT THE #2 STONE CONTAINS 40% VOIDS.
 3. DRY WELLS MUST DRAIN IN LESS THAN 72 HOURS.
 - ASSUME A SOIL PERMEABILITY RATE OF 0.5 IN/HR UNLESS OTHER DATA IS AVAILABLE.
 4. DRY WELL SHOULD BE LOCATED ABOVE HIGH WATER TABLE.

SIZING PROCEDURE:

STEP 1: CALCULATE RUNOFF VOLUME
 RUNOFF VOLUME (CU FT) = ROOF AREA OR OTHER IMPERVIOUS AREA (SQ FT) * 1 IN OF RAIN * (1/2) IN/FT

STEP 2: CALCULATE REQUIRED VOLUME OF DRY WELL
 DRY WELL VOLUME (CU FT) = RUNOFF VOLUME / 0.40 (STONE VOID %)

STEP 3: CALCULATE DIMENSIONS OF DRY WELL
 DRY WELL VOLUME (CU FT) = LENGTH (FT) * WIDTH (FT) * HEIGHT (FT)

STEP 4: CALCULATE DRAIN TIME OF DRY WELL

1. DRAIN RATE (CU FT/HR) = 0.5 IN/HR * (1/2) IN/FT * LENGTH OF DRY WELL (FT) * WIDTH OF DRY WELL (FT)
2. DRAIN TIME (HR) = RUNOFF VOLUME (CU FT) / DRAIN RATE (CU FT/HR)

IF ANSWER FROM STEP 4 IS GREATER THAN 72 HRS, GO BACK TO STEP 3 AND MAKE YOUR DRYWELL BIGGER

ISSUE DATE: MAY 2019		TOWN & VILLAGE OF ELLICOTTVILLE
REVISIONS	COMMENTS	EVL ENG DEPT. STORM - ST-04
DATE		