

DELAWARE CONSTRUCTION SPECIFICATION

PRECAST REINFORCED CONCRETE STRUCTURES CS 34

1. SCOPE

The work shall consist of furnishing the materials and performing the required work to install the precast reinforced concrete structures, as shown in the drawings.

2. Materials

Concrete – Shall have a minimum compressive strength at 28 days of 4000 psi.

Reinforcing Steel – Shall be Grade 60 deformed bars or welded wire fabric and shall meet the requirements of ACI 318.

Earth material for backfill – shall be free from rocks larger than 2 inches in diameter, rubbish, trash, roots, tree limbs, and similar material. The moisture content shall be such that proper compaction can be accomplished.

The NRCS Technician shall be granted free and open access to the manufacturer's plant and facilities for the purpose of testing materials and inspecting casting work. Precast reinforced concrete structures delivered to the job site and installed in the works of improvement shall be sound, dry, clean, and free from cracks, honeycombing, or exposed steel. Damaged units will not be accepted.

Castings (if required) shall conform to the requirements shown on the drawings. Cast cover and frames (if required) shall be carefully fitted together to prevent rocking of the cover.

3. CONSTRUCTION

Precast structures shall be placed to the grades shown on the drawings. Foundation areas for the structures shall be compacted, level, and dry before placement. No structures shall be placed until the foundation has been inspected and approved by the NRCS Technician

If additional precast sections are required to meet the grades shown on the drawings, successive sections shall be set on a full bed of soft plastic mortar. All interior joints shall be tooled. After associated pipes are connected, the concrete filling shall be placed and shaped as shown on the drawings.

Castings (if required) shall be set accurately in a full bed of mortar to the elevation shown on the drawings.

Backfill shall be placed in 12 inch lift thicknesses and compacted by two passes of a manually controlled plate vibrator or by hand tamping to a density consistent with the surrounding native material.

4. **SHOP DRAWINGS**

Shop drawings shall be submitted to the NRCS Technician prior to their casting.