

VDOT PRECAST CONCRETE DRAINAGE STRUCTURE **SHOP DRAWING SUBMITTAL FORMAT**

(IN CONJUNCTION WITH ROAD & BRIDGE SPECIFICATION REQUIREMENTS)

PROCESS

- Submit electronically (.pdf) or send hard copies. Hard copies can be sent to:

VDOT Standards and Special Design Section
1401 East Broad Street
Richmond, VA 23219

- For project specific submittals, include VDOT project & structure number.
- For project specific submittals, review and return is within 30 business days from receipt.
- For blanket approval submittals, review and return is 60-90 business days from receipt.
- If submittals are not approved and are resubmitted to address review comments, an additional 30 business days will be required for review.

CALCULATIONS

- Shall be sealed by a Virginia licensed PE having at least 5 years of precast concrete design experience.
- Structure shall meet the requirements in Section 302 of the VDOT Road and Bridge Specifications.
- Label all variables.
- Show referenced specifications (AASHTO, ASTM, etc.).
- Show assumed and referenced (note source) values.
- Show calculated forces on structure such as live load, dead load, soil load, water load, flotation, and overturning/sliding if applicable. Calculations must account for truck loading (HS-20 or HL-93) when the structure is within or has the potential to be within VDOT right-of-way.
- Show formulas used in each step.
- Structural software output must also include above information.

SHOP DRAWINGS

- Shall be sealed by a Virginia licensed PE having at least 5 years of precast concrete design experience.
- Show all dimensions of the structure including dimensions for any openings.
- Show minimum and maximum heights if applicable.
- Show and label reinforcement size and type, spacing, lap lengths, and clear cover.
- Show and label any additional reinforcement around openings.
- Show pipe size, type, and invert for a project specific submittal.
- Provide information on any castings, coatings, flexible connectors, or other appurtenances not preapproved.
- When an SL-1 is called for in the plans, refer to the Standard SL-1 for current guidance on safety slabs.

(NEW 10/2019)