Transit Shelter Guidance

Acronyms

AARB: Commonwealth of Virginia Art and Architectural Review Board (AARB)
ADA: Americans with Disabilities Act
A/E: Registered Architect or Professional Engineer holding a valid license to practice in the Commonwealth of Virginia
ASAD: 2010 ADA Standards for Accessible Design (Federal Reference Standard for ADA Compliance within the Bus Shelter)
BITS: DEB’s Building Information Tracking System
CO-13.1a: Certificate of Completion by A/E
CO-13.3: Certificate of Use and Occupancy
CO-17: Building Permit for Construction on State Property
COFM: VDOT Capital Outlay Facilities Management Division
Commissioner of Highways: The executive in charge of VDOT; as of September 2022, Stephen Brich, PE
CPSM: DGS Construction and Professional Services Manual
DGS: Department of General Services
DEB: Division of Engineering and Buildings, (DEB is a division of DGS); DGS-Director: The executive in charge of DGS; as of September 2022, Joe Damico
DEB-Director: W. Michael Coppa (also State Building Official for any construction on State-owned property)
DRPT: Department of Rail and Public Transportation
FAACS No.: Fixed Asset Accounting and Control System (FAACS) COV uses this for building inventory
LUP-A: VDOT Land Use Permit Application
Project Permit: Site Adaptation permit to construct, issued by VDOT Annual Permit Authority Holder
PROWAG: Public Right-of-Way Accessibility Guidelines (Federal Reference Standard for ADA Compliance outside of the Bus Shelter to the bus loading zone)
R/W: Right-of-way
VCC: Virginia Construction Code (Part I of the VUSBC)
VUSBC: Virginia Uniform Statewide Building Code
VDOT: Virginia Department of Transportation
VDOT-LUP: VDOT Land Use Permit; permit issued by VDOT authorizing the applicant to use or change VDOT’s R/W to place a structure in a VDOT R/W (the LUP is not a permit to construct or install a bus shelter, but is the document providing permission to do work on the R/W)
VDOT Annual Permit Authority Holder (COFM issues Project Permit for site adaptation and construction of each Bus Shelter and coordinates project close out and certificate of Use and Occupancy with DEB)
WD-1: Working Drawing Review (first DEB Working Drawing submittal, following submittals are referred to as WD-2, WD-3, etc. DEB has 28-days to review and respond to each submittal)
Regulations and Requirements for Transit and School Bus Shelters

24VAC30-151-630. Transit and school bus shelters.

School bus shelters, public transit shelters or share ride stations may be authorized under the auspices of a single use permit (VDOT). Approval of such structures must be obtained in accordance with Virginia Department of General Services requirements set forth in the Construction and Professional Services Manual (see 24VAC30-151-760). Shelters shall be located in accordance with all clear zone requirements described in Appendix A-2 of VDOT’s Road Design Manual (see 24VAC30-151-760).

Virginia Department of General Services requirements are set forth in the Construction and Professional Services Manual (see 24VAC30-151-760). Listing of documents (publications) is incorporated by reference. (link: DGS CPSM)

The following requirements do not apply to transit shelters that are not installed on Commonwealth property; while formal DRPT/VDOT/DEB approval is not required, transit-agencies must comply with the Virginia Construction Code (or VCC), local zoning ordinances, regulations and permitting requirements.

There are several prototype bus shelters that have already been approved through the Art and Architectural Review Board (AARB: https://dgs.virginia.gov/dgs/directors-office/aarb/) and Department of Engineering and Buildings (DEB) so various agencies and transit authorities can immediately contact VDOT’s COFM representative to initiate individual Project Permits under COFM’s VDOT Annual Permit Authority. If the transit-agency/applicant proposes to use a shelter model/prototype with an active DGS CO-17, the applicant may proceed to Phase 2.

**Phase 1: New Transit Shelter Approval**

Phase 1 applies to:
- All transit-shelter(s) installed on property owned by the Commonwealth, and
- All transit-shelter models that have not been approved by DGS (for a new CO-17 Building Permit for Construction) since June 30th and within the past 12-months (All Building Permits expire annually on June 30th and must be renewed). Any modification of or variation of a DGS-approved shelter (eg, dimensions, wind/seismic/geotechnical loadings, etc.) is considered a new shelter and must follow this approval process.

*DRPT will support transit-agencies through the transit-shelter approval and installation process, including VDOT and DGS regulatory roles, approvals, and costs. DGS maintains a list of DGS-approved shelters that will require updates every time a shelter design is added or deleted.*
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1. The transit-agency develops a preliminary concept plan including shelter manufacturer/model (manufacturer prototype design drawings) and shelter locations. The local VDOT Residency office (usually the Area Land Use Engineer or Assistant Resident Engineer—Land Use) will perform a site review of each proposed shelter location on Commonwealth R/W to assess potential conflicts with future VDOT construction or maintenance projects, or improvements. Transit agencies must avoid flood-plains, environmentally sensitive, historically and culturally significant areas. DRPT may assist grant recipients in rural areas (FTA 5311 agencies) with this step.

2. After their review, the local VDOT Residency office will issue conditional approval for each proposed shelter location (typically via email). The transit-agency must retain this conditional approval for their Land Use Permit Application (LUP-A) and subsequent steps in the shelter approval process.

3. The transit-agency contacts the VDOT COFM representative and requests an 11-digit State Project Code (VDOT’s COFM obtains this project number from DEB). COFM will convey the State Project Code to the transit-agency and copy the local VDOT Land Use Permitting section and Residency Administrator. All future project correspondence and documents must reference this 11-digit State Project Code.
   a. The transit-agency inserts the 11-digit State Project Code into all project documents included in their shelter package submittal (e.g., manufacturers design drawings, calculation cover sheet, all drawing/plan sheets, etc.). The manufacturer or transit-agency’s A/E may also perform this step.

4. The transit-agency submits the Prototype and Concept Plan to the Commonwealth of Virginia Art and Architectural Review Board (AARB) for their approval. The AARB is an advisory board appointed by the Governor to review the design or modifications of buildings on State-owned property. The AARB recommends approval or disapproval to the Director of General Services, to whom the Governor has delegated this authority.

5. The transit-agency submits their Prototype and Concept Plan shelter package electronically (PDF’s) directly to VDOT’s COFM representative, copying DRPT, the local VDOT Land Use Permitting section and Residency Administrator (link to map of local VDOT offices).
   b. The transit-agency’s Prototype and Concept Plan shelter package (design documents, calculation cover sheet, all plans submitted for working drawing phase review shall be sealed, signed and dated by Virginia-licensed Architect(s) and/or Engineer(s) in accordance with CPSM Building Permit Policy for Construction (Chapter 4 Codes and Technical Requirements For All Buildings on State Property, Chapter 5 Project Submittal Standards and Appendix P). If the
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transit-agency is requesting approval for more than one shelter-prototype, each prototype must be submitted separately (one Building Permit per prototype) and conform to local, state and federal requirements.

6. VDOT’s COFM representative will review the package for general compliance with VDOT and DEB requirements.
   a. If complete, COFM representative will submit the Prototype and Concept Plan to DEB. DEB will review the submittal package for compliance with applicable codes and guidelines including (but not limited to) the CPSM, VUSBC, VCC, ADA, etc.
   b. If DEB identifies any errors or omissions requiring correction, they will convey their comments back to COFM representative who will transmit them to the transit-agency.

7. DEB will notify COFM that the Prototype and Concept Plan is approved and requests the submittal of a CO-17 application. DEB processes and approves the CO-17, which is then conveyed to the COFM. Refer to the Building Permit Policy in CPSM Appendix P for further information.

Phase 2: Site Adaptation Project Permitting Process

Phase 2 applies to:
  ● All transit-shelter(s) installed on property or maintained R/W owned by the Commonwealth, and
  ● Transit-shelter prototypes previously approved by DGS: either through the process outlined in Phase 1 (for new shelter prototypes), or shelter models that have received a CO-17 Building Permit for Construction since June 30th and within the past 12-months (All Building Permits expire annually on June 30th and must be renewed).
  ● Note: Any modification of or variation of a DGS-approved shelter prototype (eg, dimensions, wind/seismic/geotechnical loadings, etc.) is considered a new shelter and must follow the process outlined in Phase 1.

1. After VDOT and DEB approve the Prototype and Concept Plan, the transit-agency will prepare and submit their final shelter project plan package to VDOT COFM. COFM (Annual Permit Authority Holder) will issue the site adaptation Project Permit.
   a. Packages should include: the approved prototype shelter specific to each shelter location, foundation drawings, a dimensioned site layout showing the Commonwealth’s R/W, existing and proposed drainage features, existing underground and overhead utilities, any proposed utility service to the shelter, and Americans with Disabilities Act (ADA) requirements.
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2. VDOT’s COFM representative will review the package for general compliance with VDOT and DEB requirements, and ensure that DEB-approved Prototype Plans are included in the final shelter project submittal package.
   a. COFM representative will review each site-specific shelter location for compliance with the approved Prototype drawings, shelter approaches and loading pads for ADA/ASAD/PROWAG-compliance, foundation drawings, limits of the Commonwealth’s R/W, existing and proposed drainage features, existing underground and overhead utilities, any proposed utility service to the shelter, all applicable codes and guidelines including, but not limited to the CPSM, VUSBC, VCC, etc.

3. If correct, COFM will issue the VDOT Annual Permit Authority Site Adaptation Project Permit.

4. The transit-agency/applicant reimburses COFM for DGS-DEB’s costs to review the shelter package. A COFM representative will facilitate this reimbursement. (The current DGS-DEB review rate is billed at $192.00/hour).

5. The COFM representative will notify the transit-agency, DRPT, and VDOT’s local Land Use Permitting section.

Transit-shelter owners must renew their Building Permits annually. Should a transit-agency/applicant select a transit shelter model/prototype that DGS has previously approved or permitted within the past 12 months (for another transit-agency), the new applicant is still responsible for obtaining the requisite building and occupancy permits for their transit-agency’s transit shelters.

Phase 3: Obtain VDOT Land Use Permit

The transit-agency/applicant submits the following to local VDOT Residency Land Use section:

1. LUP-A land use permit application;
2. Appropriate number of sets of DGS-approved transit shelter plans;
3. The approved DGS CO-17;
4. Draft maintenance agreement.

The local VDOT Residency Land Use section issues an approved Land Use Permit to the transit-agency and coordinates construction schedules for each shelter location.

Phase 4: Shelter Construction
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The transit-agency/authority must construct the shelter according to all conditions and requirements stipulated in the CO-17 Building Permit, Site Adaptation Project Permit and the approved VDOT land use permit application.

Completed shelters shall be inspected for conformance with the VUSBC, DEB-approved plans and specifications by a:
1. Local municipality building inspector; or
2. Local or transit-agency employee who is a Registered Architect or Professional Engineer holding a valid license to practice in the Commonwealth of Virginia; or
3. Third-party Registered Architect or Professional Engineer holding a valid license to practice in the Commonwealth of Virginia.

The transit-agency shall submit the Inspection report and form CO-13.1a Certificate of Completion by A/E or Project Manager to the VDOT COFM representative who will convey the form to DEB. The COFM representative will submit the close out documents, along with the Form CO-13.3, Certificate of Use and Occupancy, submitted via BITS when requesting that a Certificate of Use and Occupancy be issued.

Upon the issuance of a Certificate of Occupancy the transit-agency/authority must notify the local VDOT Land Use section to request final inspection and close-out of the land use permit authorizing the shelter installation within state maintained R/W. This request should include a copy of the permit completion report form and the certificate of occupancy issued by DGS.

Notes

The transit-agency’s Prototype and Concept Plan shelter package (design documents, calculation cover sheet, all plans submitted for working drawing phase review shall be sealed, signed and dated by Virginia-licensed Architect(s) and/or Engineer(s) in accordance with CPSM Building Permit Policy for Construction (Chapter 4 Codes and Technical Requirements For All Buildings on State Property, Chapter 5 Project Submittal Standards and Appendix P). If the transit-agency is requesting approval for more than one shelter-prototype, each prototype must be submitted separately (one Building Permit per prototype) and conform to local, state and federal requirements.

Common DEG-DEB comments are listed below:
- 11-digit State Project Code is required on all documents submitted (all drawing sheets, on project calculations and supporting project documents for lighting, etc.).
- Project Submittal for AARB review and approval can be made concurrently with DEB review Legibility: Per CPSM 5.2.4, all text needs to be a minimum of 1/10", A/E seals should not obstruct text or drawing graphics.
- Remove all copyrights from all documents: Per CPSM 7.5.25, the State owns all documents produced on their behalf for construction on State-Owned Property.
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- All Documents are required to have one single, uniform date throughout the document package, with day, month, and year.
- Provide specifications for all electrical components (e.g., Hard-wired lighting systems, Solar-powered bus shelter lighting, Solar-powered pole lights, etc.).
- DGS-DEB recommends making the toe-kick space at the bottom of the bus shelter to top of concrete slab = 9” (min.) this will provide additional maneuverability for wheelchair-bound handicapped individuals.
- Provide a dimension for the clear (open) wheelchair space.
- Take note of mounting base plates that project above the concrete pad and obstruct maneuverability and clear pathways.
- Provide the following code information on the Cover Sheet:
  - 2018 Virginia Uniform Statewide Building Code: (2018 VUSBC)
  - 2018 Virginia Construction Code: Part I of the VUSBC (2018 VCC)
- Handicapped Accessibility:
  - 2010 ADA Standards for Accessible Design – 9/15/2010 (ASAD)
  - ASAD accessibility standards apply to the bus shelter structure and its foundation (concrete slab).
  - PROWAG accessibility standards apply to the site-adaptation features surrounding the bus shelter structure and its foundation (concrete slab): approach sidewalks, curbs, etc.
- Include the following Structural Design Data:
  - Roof Live Load, per VUSBC 1603.1.2.
  - Roof Snow Load Data, per VUSBC 1603.1.3.
  - Wind Design Data, per VUSBC 1603.1.4 – Wind Speed (mph) (Ultimate Wind Speed), • Wind Exposure Category.
  - Risk Category, per VUSBC 1604.5.
  - Seismic Design Category.
  - Seismic Site Class.
  - Soil bearing requirements.
  - Per CPSM 5.8.6.2: In addition to the Structural criteria requested by the DEB Civil/Structural Review Engineer, provide the following code / design data:
- VUSBC Construction Type; (Other Bus Shelters have been classified as Type IIB) • (Use) Group(s) per VUSBC; (Other Bus Shelters have been classified as Use Group U) • Building Gross Floor Area (total area including the wall thickness)
- Building Area (per VUSBC definition) (total area under roof, but excludes the wall thickness)
- Height of Building; (average height of the roof)
- Number of Stories; (1 Story), Shelters are considered a Utility and Miscellaneous Use Group U;
- Additionally, the transit-agency (and their A/E) needs to add the Occupant Load to their list of Code Data: 1 Occupant per 5 Sq. Ft. (for the two 40 Sq. Ft. Submitted Shelters,
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DEB calculated 8 Occupants, as reflected on the DEB-approved CO-17s, copies attached)

NOTE: Transit-shelter owners must renew their Building Permits annually. Should a transit-agency/applicant use a transit shelter model/prototype that DGS has previously approved/permitted within the past 12 months for another transit-agency, the applicant is responsible for renewing/updating permits for their transit-agency’s transit shelters annually. As an example, if “transit-agency Z” selects a shelter that DGS-DEB has approved for “transit-agency A”, “transit-agency Z” is responsible for renewing their shelter permits annually moving forward. **Clarification:** This pertains to the design documents: once a shelter is installed and a CO-13.3, Certificate of Use and Occupancy is issued, the CO-13.3 remains valid until the Bus Shelter is demolished or removed from State-owned land. A CO-17.1 demolition permit is required for removal of any structure from state-owned property.

All State agencies are eligible to make electronic submissions via a BITS upload menu. Agencies are required to identify those users who are authorized to upload submissions. For the initial rollout for each agency, a BITS “multi-user permissions form” has been provided to the BITS Agency Access Coordinators. Going forward, additional users can be granted authorization using the standard individual User Account Request (UAR) form.
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Approval Workflow Diagram

Phase 1
- Develop preliminary concept plans including shelter prototype drawings and shelter locations
- Obtain VDOT Residency Land Use conditional approval for each proposed shelter location
- Request 11-digit State Project Code from COFM
- Submit concept plans to AARB for review and approval
- Submit concept plans to COFM/DEB for review and approval
- DEB/COFM will issue a CO-17 Building Permit for Construction

Phase 2
- Submit final project package including shelter locations and VDOT’s conditional approval to COFM for review and approval
- COFM will issue the VDOT Annual Permit Authority Site Adaptation Project Permit

Phase 3
- Submit VDOT LUP-A to local permit office and obtain approved Land Use Permit

Phase 4
- Construct the shelters in accordance with all conditions and requirements in the CO-17 Building Permit and Site Adaptation Permit, and Annual Permit.
- A Local Building Inspector or a Licensed A/E will perform a final inspection and submit a CO-13.1 Certificate of to COFM
- COFM will apply for and DEB will issue CO-13.3 Certificate of Use and Occupancy
- Notify local VDOT permit office for final inspection and close out of Land Use Permit

*Phase 1 can be skipped if the shelter prototype used is on DEB’s list of approved shelters