



**SUMMARY OF GENERAL SITE PLAN REQUIREMENTS  
DEPARTMENT OF ENGINEERING**

**August 21, 2017**

**CITY CODE REFERENCES**

9.1	Chesapeake Bay Preservation Area Overlay District
11	Erosion and Sediment Control, Excavation
14.1	Flood Protection
31.2	Stormwater Management
32-270 TO 32-274	Parking Lots
33.1-39 TO 33.1-55	Subdivisions- Requirements for Design and Minimum Improvements
38	Water, Sewers and Sewage Disposal
40.1-5	Zoning- Development Standards

*This summary gives a broad overview of most of Portsmouth's site plan requirements for typical development projects. Consult the City code for a complete listing.*

**1. Components required**

- (a) Survey of Existing Conditions
- (b) Site Layout Plan
- (c) Utility and Drainage Plan (existing and proposed)
- (d) Erosion and Sediment Control Plan
- (e) Traffic Control Plan
- (f) Landscape Plan
- (g) Site Lighting Plan and Photometric Plan
- (h) Site Plan Information chart (on first or cover sheet)
- (i) Drainage and utility calculations (2 copies)
- (j) Stormwater Management Plan (if required)
- (k) Traffic Impact Analysis (if required)

If any components or copies are missing, the plan may be returned without review. Minimum eleven copies for review, thirteen copies for approval (15 copies for subdivisions).

**2. Topo of Existing Conditions**

- (a) Depict the right of way showing both sides of adjoining streets with centerline and curb grades and type of surface shown, as well as sufficient grades on adjacent property to ensure proper grading and connection with proposed improvements.
- (b) Existing drainage facilities and stormwater outfall (sizes, inverts, and slopes of existing pipes).
- (c) Existing water lines servicing property and sizes, including meter size.
- (d) Existing sanitary sewer facilities and inverts.
- (e) Distance to nearest cross streets and their names.
- (f) Vicinity/Location map.

**3. Survey of Property to be Developed**

- (a) Easements, if any, shall be shown including utility and temporary construction.
- (b) All monuments shall be properly shown.
- (c) Elevations shall be referenced from City of Portsmouth datum (NAVD 88). Show sufficient elevations on adjacent properties to evaluate drainage pattern impacts. Benchmarks shall be shown or referenced.
- (d) All property boundaries shall be properly shown and delineated. List adjacent property owners include addresses and parcel numbers.

**4. Improvements Required**

- (a) All parking areas shall be paved; minimum section 2" asphalt surface course, 6" crushed base stone. Storage areas on industrially zoned parcels that are totally separate from required parking lots may be installed with gravel or surface treatment. Actively used storage areas may require surface treatment.
- (b) Curb and gutter, street widening as required, and overlay of pavement to centerline on all adjacent streets bordering property being improved or developed. Minimum pavement section of 6" of crushed base stone and 2" pavement section of bituminous concrete surface. Approved pavement section based on traffic and soil conditions with design calculations. For streets with existing improvements, all existing entrances and ramps not to be utilized or approved as part of new development must be removed and replaced with curb and gutter to match existing including pavement patch. Minimum grade on curb and gutter in right-of-way to be 0.25%. The City Engineer may waive curb and gutter and sidewalk improvements in the right of way for parcels having an industrial zoning designation under certain circumstances. Drainage pipes shall be installed in all ditches along the street frontage of the property.

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- (c) Minimum 5-foot wide sidewalks shall be installed on all street frontages. The Planning Director may require wider sidewalks. Where sidewalks are required, wheelchair access ramps and crosswalks shall be installed at intersections. All cracked or broken sidewalks and curb and gutter existing at the start of construction and damaged during construction shall be removed and replaced to the nearest joint. Patching is not allowed. On-site pedestrian improvements may be required.
- (d) Concrete curb and gutter and/or concrete wheel stops are required around the perimeter of all parking lots. Wheel stops may also be required to protect landscaping or accessible routes. Drive aisles separate from the parking lots do not require curb or wheel stops.
- (e) All storm drain joints shall be double-wrapped with 24" wide geotextile fabric per City standards.
- (f) Asphalt surface course in right-of-way shall be either S-5 or SM-9.5
- (g) Water service line between water main and meter shall be type K copper.
- (h) Right-of-way improvements: Unless otherwise agreed to or allowed by the City Engineer, all right-of-way improvements shown on the plan shall be installed and accepted by the City prior to use or occupancy of all primary or accessory structures or uses.
- (i) Minimum street radius at intersections is 25'.
- (j) Ensure that all proposed swales behind the parking lots will still drain once the street curb is installed.
- (k) Note that all trees and shrubs must be planted so that the trunk does not extend into the right-of-way at maturity.
- (l) Reinforced concrete pipe, minimum size 15" diameter, shall be installed in all existing ditches along the right-of-way being developed.
- (m) Where possible, storm drain pipes shall be designed to have a flow velocity of 2.5 feet per second when flowing full.

## 5. Information Required

- (a) Drainage computations for proposed development. Install drainage to proper pickup point as shown on Master Drainage plans. Consult with staff Engineer for specific requirements, which depend on capacity of existing system and Chesapeake Bay Requirements, if applicable. At a minimum, post-developed runoff shall be held to pre-developed runoff conditions for the 10-year storm, with no damage to structures for the 100-year storm. Stormwater quality calculations shall be subject to the Part II Ctechnical criteria of the VSMP regulation for grandfathered projects in accordance with section 32.1-10 of the City Code. All other projects shall adhere to the current water quality requirements for the local Virginia Stormwater Management Program.
- (b) The Portsmouth Flood Protection Ordinance was adopted in 2015, and may affect the design and placement of constructed facilities in certain flood

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zones. Consult chapter 14.1 of the City Code and the City's Floodplain Manager for more information.

- (c) Proposed grades shall be shown for all proposed site improvements and site grading.
- (d) All water services shall have the appropriate backflow prevention per Chapter 38 of the City Code. Consult with the Public Utilities Department for details.
- (e) Proposed connection with sanitary sewer with grades and computations as well as proposed connection to waterlines. Show all service lines and meter sizes. Sanitary laterals to be minimum 6" dia. PVC from cleanout to existing main line. Cleanout shall be placed as close as possible behind the curb in the right of way. All new sanitary sewer pipe in the right of way shall be PVC C-900.
- (f) Driveways shall be dimensioned and noted to be 7" thick, 3,000 pound A.E. concrete from curb of existing road to property line.
- (g) Legend shall be shown appropriate to the plan submitted.
- (h) Internal drainage shall be required for parking lots with adequate space for ten or more parked cars in standard configuration. Driveways between property line and street curb shall be allowed to flow to the street.
- (i) An Erosion and Sediment Control Plan meeting the requirements of the Virginia Erosion and Sediment Control Handbook. See Erosion and Sediment Control Plan Requirements for more information.
- (j) Landscaping plan, showing compliance with the tree replacement ordinance and the landscaping ordinance is required. Landscaping buffers between parking lots and the street, and between parking lots and adjacent residential properties, shall be furnished as required by the Zoning Ordinance.
- (k) Proper planting instructions and diagram must be provided.
- (l) ADA accessible ramps and necessary accommodations in right-of-way shall be designed in accordance with VDOT and ADA requirements.
- (m) Where applicable, US Army Corps of Engineers approval and permit will be required before start of construction.
- (n) Note on plans that all cracked concrete within the right of way shall be removed to the nearest joint and replaced. Patching is not acceptable.
- (o) Use the enclosed Site Plan Information chart for all site statistics and contact information. The sheet shall be filled out completely and shown in its entirety on the first or cover sheet of the site plan.
- (p) Note on site plan that all construction methods and materials shall conform to Hampton Roads Planning District Commission Regional Construction Standards (current) Edition as amended by the City of Portsmouth Special Provisions.
- (q) Submit copies of any applicable required permits.
- (r) Plan must be sealed and signed by a professional engineer or 3(b) land surveyor licensed to practice in the Commonwealth of Virginia.

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- (s) If any parking lot and/or exterior lighting is provided, it must be shown on the plans, and a photometric plan shall be submitted to certify that light does not spill onto adjacent property. All site lighting shall comply with section 40.1-5.9 of the Zoning Ordinance.
- (t) A traffic control plan for work in the right-of-way is required. The plan must be in accordance with the Virginia Work Area Protection Manual.
- (u) The City Engineer may require offsite improvements to the transportation network if a traffic analysis indicates such improvements are warranted.

## 6. Dimensional Standards

- (a) Standard parking space size, 9' x 18'. Minimum aisle width of 18 feet where parking spaces are angled 60 degrees or less, 24' for angles between 60 degrees to 90 degrees. Minimum width for two-way traffic is 24'.
- (b) Only spaces that exceed the minimum required may be designated for compact car parking spaces, 8' x 16', if approved by the City Engineer.
- (c) In 8 handicap spaces, a minimum of one shall be marked as a van accessible handicapped space, 8' wide, with an 8' aisle beside it. Handicap parking spaces shall be placed as near to the building as possible.
- (d) Unless otherwise approved by the City Engineer, the maximum driveway width shall be 50' at the curblines and 35' at the front property line.
- (e) Drive aisles outside of parking space areas shall be a minimum of 24' wide for two-way traffic, 15' for one-way traffic.
- (f) No driveway (at the curb) shall be located within 15' of the extension of the property line of an intersection, or nearer than 5' from the end of a curb radius. When not at an intersection, driveways must be at least 10' from the extension of the property line at the curb. Two driveways on the same street frontage must be separated by at least 75' at the curblines.
- (g) Parking lots shall be laid out so that vehicles do not back out into a City right-of-way.

## 7. Additional Information

- (a) Projects that disturb over 1 acre of land require a Virginia Stormwater Management Program (VSMP) Construction General Permit from the **Virginia Department of Environmental Quality** at least 14 days prior to the start of construction. A completed and signed registration statement shall be submitted to the City of Portsmouth with the site plan for entry into the sate database. Refer to <http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx> for more information.
- (b) Thirteen copies of the site plan, (15 copies for a subdivision plan,) plus a digital copy on disk, cd, or flashdrive is required for final approval. The digital file shall be in PDF format.

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- (c) Site Plan review fees are noted on webpage for the Engineering Department. Plan approval is valid for five years.
- (d) Normal review time on the first submittal is 4 to 6 weeks; re-submittals, which satisfactorily address all review comments, are normally approved within two to three weeks.
- (e) Projects constructed within the Chesapeake Bay Preservation Area (CBPA) must contain measures to prevent degradation of the downstream water quality, and to protect existing vegetation. Sites within the CBPA may utilize alternate paving materials in the parking lots to decrease or eliminate runoff, subject to the approval of the Engineering Department.
- (f) For grandfathered projects: Portsmouth does not use the statewide watershed default value of 16% for pre-developed impervious areas. For lots platted after April 5 1994, we have 3 distinct watersheds, each with a different impervious value (19%, 40%, or 54%). Refer to the City's **Chesapeake Bay Watershed Map** to determine the specific project's appropriate watershed imperviousness value. For lots platted after April 5, 1994, use the city-wide imperviousness average of 41%.
- (g) Note that all work in the right-of-way shall conform to the construction standards of the *Hampton Roads Planning District Commission Regional Standards, Current Edition*, as amended by the City of Portsmouth Special Provisions. Due to the frequency that the Portsmouth Special Provisions are being updated, check with the review Engineer for a copy of the latest revision.
- (h) Permit fees are noted on the webpage for the Engineering Department.
- (i) A right-of-way permit is required for all work in the right-of-way. The permit is required prior to starting any work in the right-of-way. A land disturbance permit may also be required for projects where work in the right of way do meet the requirements for exemption.
- (j) Driveway permit fees are required for each residential or commercial driveway apron.
- (k) A Land Disturbing permit must be acquired from the Engineering Department prior to any land disturbing activities taking place.
- (l) Should a particular project require more than four hours total inspection from an Engineering Department inspector, their time will be charged to the developer at \$25/hour. Charges must be paid prior to release of the site for occupancy or acceptance.
- (m) All fees must be paid prior to scheduling an Engineering final inspection.

## 8. References

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City Code <http://www.portsmouthva.gov/187/City-Code-Charter>

DEQ/VSMP

<http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits.aspx>

### 9. Points of Contact

Engineering Department	393-8592
Zoning Administration/ Planning Department	393-8836
Floodplain Management/ Planning Department	393-8836
Public Utilities	393-8561
Stormwater Management	393-8592
Landscaping/Planning Department	393-8836

**END**

