



REGIONAL CONSTRUCTION STANDARDS

SIXTH EDITION

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**CDM
Smith**

THE REGIONAL CONSTRUCTION STANDARDS

The Cities and Counties that make up the region of Hampton Roads, Virginia, along with the Hampton Roads Sanitation District (HRSD), major water supply purveyors, and the Hampton Roads Utility and Heavy Contractors Association (HRUHCA) have recognized the need to develop uniform construction standards for improvements in public rights of way. The initial direction was to address “horizontal” improvements and those involving the major elements of roadways, drainage and utilities (water distribution and wastewater collection). The Standards are intended to accommodate most of the “typical” construction projects in the region. Therefore, these documents are intended to support the majority of issues the communities face in building minor roads and utilities, with a more recent emphasis also placed on the rehabilitation of sanitary and storm sewer systems.

The *Regional Construction Standards* are a reference document *comprised* of Technical Specifications, Standard Details and “Front-End” (General Provisions) documents (the legal framework and administrative provisions for construction contracts). The user should normally prepare Construction Drawings and Special Provisions for individual projects. Special Provisions are modifications, additions, and/or deletions to the *Regional Construction Standards* and should address any particular administrative, procedural, legal, or technical requirement of the project and/or the locality; along with the appropriate completed bidding documentation and are tied to the *Regional Construction Standards* by reference (Section 110). **The Technical Specifications and Standards Details should NOT be reproduced when projects are bid for construction. Owners typically reproduce only the Front-End Documents, which include the Special Provisions (Section 110).**

These Standards were developed under the auspices of the Hampton Roads Planning District Commission (HRPDC) and represent a collaborated effort of the 16 communities that constitute the HRPDC, the Hampton Roads Sanitation District (HRSD), and the Hampton Roads Utility and Heavy Contractors Association (HRUHCA). Many municipal, HRSD and HRUHCA representatives have spent countless hours serving on committees that guided, edited, refined, and established these *Regional Construction Standards*. Designers, material suppliers, contractors, attorneys, purchasing agents and consulting engineers have provided timely and insightful comments, along with the Virginia Department of Transportation, the Virginia Department of Health - Office of Drinking Water Programs, and the Virginia Department of Environmental Quality. This document has incorporated many of the construction standards originally adopted by HRSD and the localities of Hampton Roads to provide a more comprehensive document. The document also substantially relies on VDOT’s Road and Bridge Specifications in its divisions regarding products/materials, roadway construction, miscellaneous, incidental construction, landscaping, and traffic control devices, to facilitate the overall construction process.

While diligent effort has been made to provide reliable, accurate, and up-to-date information, neither the communities of Hampton Roads, HRPDC, or its consultants, can place a guarantee on the correctness of the data or information contained in this document. The authors and editors do hereby disclaim any responsibility or liability in connection with the use of these *Regional Construction Standards* or of any data or other information contained therein.

This document may be obtained electronically at www.hrregconstds.org or by purchasing a CD at the offices of the HRPDC. The front end documents are available in Microsoft Word software, while the technical specifications and standard details are available in Acrobat Reader (.pdf) format. The user must acknowledge all modifications to the *Regional Construction Standards* and illustrate changes in the Front End documents using ~~strike-throughs~~ and **bold** for deletions and additions, respectively. The user is entirely responsible and completely liable for misrepresentations to this document.

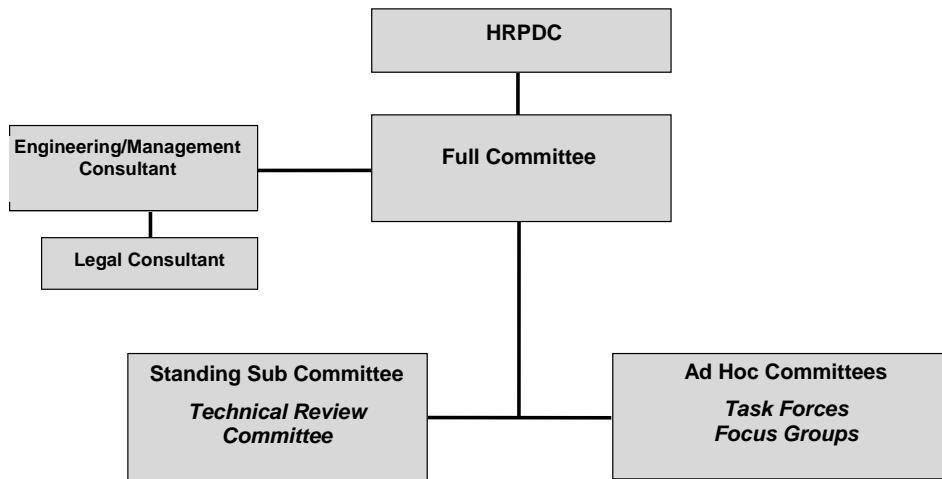
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ADMINISTRATIVE STRUCTURE

The Organizational Structure for the maintenance of HRPDC's *Regional Construction Standards* is illustrated in the accompanying figure and briefly described below.



Program Administration

HRPDC is responsible for the administration of the financial and contractual issues for the continued implementation of the *Regional Construction Standards* program.

Full Committee

The Full Committee (FC) is the governing body for the *Standards*. The Full Committee consists of up to 34 voting members – up to two voting representatives from each of the 16 cities and counties in the Hampton Roads Planning District and one voting member from the Hampton Roads Sanitation District (HRSD) and the Hampton Roads Utility and Heavy Contractors Association (HRUHCA).

Technical Review Committee

The Technical Review Committee (TRC) is a standing subcommittee established by the Full Committee to provide technical reviews of the *Regional Construction Standards*. The TRC updates and edits the document and prepares new technical specification sections and standard details. The TRC collects information from individuals, jurisdictions and agencies with an emphasis on reviewing Special Provisions and technological advancements to determine common elements or improvements that could be incorporated into the future editions or amendments.

Ad-Hoc Committees

At key stages of development of the document or for special assignments, Ad Hoc Committees are formed and are often referred to as Focus Groups or Task Force Committees. In the past, Focus Groups have been convened to provide critical input of the *Standards* prior to the completion of new editions. Focus Groups have included: City and County Attorneys and Purchasing Agents whose task has been to review the front-

end portion of the document; and, consulting engineers, contractors, and suppliers who have reviewed the entire document, with emphasis on the technical specifications and the standard details. Task Force Committees have also been convened to study specific assignments, such as the Large Diameter Pipe Task Force and the Manhole Sustainability Task Force that addressed specific issues dealing with new, precast, manholes and coating systems.

Engineering/Management/Legal Consultant

A consultant is used for technical, management, legal advice and also performs training. The consultant serves at the pleasure of HRPDC and provides guidance and support for the committees, as well as HRPDC.

More information regarding the organizational structure and procedures used to maintain and implement the HRPDC *Regional Construction Standards* may be found at <http://hrregconstds.org/>.

Want to get involved?

If you would like to help provide quality construction practices and simplify the bidding and construction administration process throughout the Hampton Roads region, HRPDC would like you to join one of the above described functions. Please e-mail Whitney Katchmark at WKatchmark@HRPDCVA.gov or call 757-420-8300.

This document was produced through financial support from the Hampton Roads Planning District Commission and its seventeen member local governments, the Hampton Roads Sanitation District and, the Hampton Roads Utility and Heavy Contractors Association.

ACKNOWLEDGMENTS

HRPDC would like to thank all of the volunteers and their employers that have participated on the TRC and Full Committees since the previous edition was published. We would also like to express our appreciation to all the County and City Attorneys and Purchasing Agents; Consultants, Contractors and Suppliers who participated in Focus group sessions. Without their involvement, commitment and expertise, this edition would not have been possible.

Technical Review Committee		Full Committee	
Name	Representing	Name	Representing
Mark Swilley, Chair	York County	Richard Hartman, Chair	Portsmouth DPW
Ann Copeland	HRSD	Rich Nettleton, Vice-Chair & Chair	Virginia Beach DPU
Arnie Cuevas	Chesapeake	Stephen Williams, Vice-Chair	Newport News Engineering
Bill Witt	HRUHCA	Aaron Small	Williamsburg DPW
Cathleen Saunders	Newport News Engineering	Arnie Cuevas	Chesapeake DPU
Chad Edralin	Norfolk DU	Arnie Francis	Gloucester County
Chris Garrett	Brown & Caldwell	Bill Witt	HRUHCA
Chris Johnson	Virginia Beach DPU	Bob Speechley	Poquoson
Craig Pittman	James City Service Authority	Chad Edralin	Norfolk DU
Danny Johnson	HRUHCA	Chris Chambers	Norfolk DPW
Danny Maas	Brown & Caldwell	Craig Pittman	James City Service Authority
Danny Poe	James City Service Authority	Dan Horne	VDH – Office of Water Programs
DeWayne Craddock	Virginia Beach DPU	Dan Jennings	Isle of Wight County
Eric Mowry	Clark-Nexsen	Dean Perry	Chesapeake DPU
Franklin Hudgins	Hazen & Sawyer	Ed West	Chesapeake DPU
H.L. Mathews	Norfolk DU	Ellen Roberts	Poquoson
Jeffrey Harper	Portsmouth DPW	Gary Hart	HRSD
Jeff Scarano	Brown & Caldwell	James Canning	James City Service Authority
Jim McKechnie	Portsmouth DPU	James Wright	Portsmouth
Jim Stephahn	HRUHCA	Jim McKechnie	Portsmouth
Jonathan Thomas	Tri-State Utilities	John O. Kaoudis	Newport News Engineering
Karen Harrell	Chesapeake DPU	John Saintsing	Tri-State Utilities
Larry Andrews	Suffolk DPU	Jonathan Thomas	Tri-State Utilities
Mark Mallamo	Chesapeake DPW	Kevin Lundgren	Chesapeake DPW
Mark Velasquez	Suffolk DPW	Larry Andrews	Suffolk DPU
Michael Vergakis	James City Service Authority	Mark Swilley	York County
Mike Moran	Newport News Engineering	Michael Vergakis	James City Service Authority
Mohammed Shar	Newport News Engineering	Norbert Kuhn	Virginia Beach DPW
Norbert Kuhn	Virginia Beach DPW	Paul Dunn	Chesapeake DPW
Scott Funk	URS/Kimley-Horn	Rick Dempsey	Norfolk DU
Selo Qejvani	Norfolk DU	Ryan Hunt	Suffolk DPU
Shawn Gordon	James City County	Sam Sawan	Chesapeake DPW
Shawn Heselton	HRSD	Scott Frechem	Chesapeake DPW
Todd Toler	Chesapeake DPU	Scott Smith	Norfolk DPW
Vince Urbano	Newport News Engineering	Selo Qejvani	Norfolk DU
		Shawn Gordon	James City County
		Steve Hatcher	Isle of Wight County
		Tony Wilson	Isle of Wight County
		Vince Urbano	Newport News Engineering
		Wayne Griffin	Town of Smithfield

IMPORTANT NOTICES!

New editions of the *Regional Construction Standards* are anticipated approximately every three to four years. The time interval allows the users to become more familiar with the document, while the need for updating Special Provisions in each locality is greatly reduced to keep up with newer versions. When modifications are required between editions, “Proposed Revisions” are considered by the Technical Review Committee. If approved by the TRC, the Full Committee will then consider these Proposed Revisions for adoption. If approved by the Full Committee, the Proposed Revision becomes a “Publication Update” which is then posted on the HRPDC Web Site. Notification of a recently adopted Update is e-mailed to the jurisdictions, which are responsible for accepting the Update on behalf of their locality and including the Update in their Special Provisions. Other users wishing to be notified via e-mail should contact HRPDC for inclusion on an e-mail tree. Continuing workshops and training sessions are also provided to the Hampton Roads localities and the general public to facilitate the implementation and understanding of the document. More information including meeting dates, status of Proposed Revisions, *Regional Construction Standards* sections downloads, etc. may be found at the HRPDC website mentioned above.

USE OF PROFESSIONAL ENGINEER’S SEAL

In Virginia, a professional engineer may only affix his seal to plans and specifications that he has either directly prepared or were prepared under his direct supervision. The seal indicates that the professional engineer has had complete control and direction over, and accepts responsibility for, the sealed work. (See 18 Va. C10-20-760). Since the *Regional Construction Standards* were developed by consensus of committees comprised of experienced individuals representing various industry groups rather than under the complete direction and control of a professional engineer, the *Regional Construction Standards* are not sealed, nor would it be appropriate for the *Regional Construction Standards* to be sealed without reference to the application of the *Regional Construction Standards* to a specific project.

When a professional engineer prepares design documents for a specific project and incorporates the *Regional Construction Standards* into that design by reference, the professional engineer’s seal of the particular plans, specifications and drawings for that project represents his approval of the *Regional Construction Standards* as incorporated by reference into such particular plans, specifications and drawings for such project. In other words, the professional engineer who stamps or seals any plans, specifications, reports or other documents incorporating the *Regional Construction Standards* by reference is responsible for assuring that such plans, and the *Regional Construction Standards* as incorporated into such plans by reference, are adequate and appropriate for the particular project. Although it is encouraged that the *Regional Construction Standards* be used as appropriate and applicable to public right of way projects in Hampton Roads, the ultimate decision about what goes into such plans, specifications, reports, or other documents for a specific project must be that of the professional engineer who signs and seals them.