

# CHARLESTON FIRE DEPARTMENT

## Fire Marshal Division



<b>Fire Service Underground Permit Application</b> Submit plans to: <b>Permit Center</b> <b>2 George Street, Charleston, SC 29401</b>	Master Bldg. Permit: #BC
	Underground Permit: #FI
	Project Value: \$

### Installation Location

Business/Location Name:	
Street Address:	Building/Suite:
Property Owner/Rep Name:	Owner/Rep. Contact Number:
Current use of structure:	
Proposed use of structure:	

### Installation Contractor Responsible for Fire Service Underground

Contract company:	State License #:	Expiration Date:
Address:	City, State & Zip:	
Contact person name:	Contact Phone:	
Contact fax:	Contact E-mail:	

### Fire Service Underground System Details

<input type="checkbox"/> New system for new building <input type="checkbox"/> New system for existing building <input type="checkbox"/> Replacement of existing, add reason in notes <input type="checkbox"/> Modification of existing, add reason in notes	Plans must clearly indicate the design standard(s) and edition utilized. The minimum acceptable design criterion is NFPA 24, 2013 Edition. When newer editions are utilized the editions must be clearly noted on the plans.
Square Footage of Project Area:	Size of Public Mains feeding system:
Needed fire flow for building: <input type="checkbox"/> ISO calculations <input type="checkbox"/> IFC Appendix D <input type="checkbox"/> Other calculations	
Installation: <input type="checkbox"/> New Construction <input type="checkbox"/> Renovation/Remodel of existing system	
Fire Sprinkler System Type(s): <input type="checkbox"/> None <input type="checkbox"/> Wet <input type="checkbox"/> Dry <input type="checkbox"/> Pre-Action <input type="checkbox"/> Deluge <input type="checkbox"/> Anti-Freeze	
Fire Sprinkler System: <input type="checkbox"/> None <input type="checkbox"/> NFPA 13 <input type="checkbox"/> NFPA 13R <input type="checkbox"/> NFPA 13D	
Standpipes: <input type="checkbox"/> None <input type="checkbox"/> Auto Wet <input type="checkbox"/> Manual Wet <input type="checkbox"/> Auto Dry <input type="checkbox"/> Manual Dry	
Hydrants: <input type="checkbox"/> None <input type="checkbox"/> Public <input type="checkbox"/> Private	

### Plan Submittal Checklist

The following check list is provided as a **summary of the minimum** information required before a review will be initiated. It is the contractor's responsibility to have a thorough working knowledge of the applicable City, State, National Fire Protection Association (NFPA), and International Code Council (ICC) 2015 editions requirements and to include additional information specific to this system. Failure to provide information will delay the review process.

#### All Projects

1. Fire Service Underground Permit Application, 3 sets of prints, 1 set of documents (specs, etc.)
2. Name, address, phone, fax, e-mail, and state contractor's license number on the submitted prints.
3. Creation date of plan, revision dates, point of compass, scale and graphic representation of scale.

# Fire Service Underground Permit Application

## Plan Submittal Checklist (continued)

### All Projects (continued)

4. Complete address (include building name or suite) of project (include tenant name if known).
5. Clear and definitive scope of work for the project and the company permitting the work.
6. Size of the water mains supplying the system.
7. Location of back flow prevention vault and/or FDC.
8. Equipment cut sheets for all materials and components.
9. Thrust blocks or other approved restraint methods as allowed by 2013 NFPA 24 section 10.8.
10. Hydraulic calculations that demonstrate the total system demand at the needed PSI for system operation.

### New Installation/Major Remodel

11. Site/plot drawings with paved roads, fire lanes, parking, and building orientation. Include locations of area hydrants and the remote FDC. FDC's shall be labeled in accordance with City Requirements.
12. Site/plot drawings indicating location, weight/class, size and length of underground piping and materials from water source to riser. Include any valves, meters, valve pit (include pit details), depth to bury pipe, thrust blocks, etc.
13. All valves, excluding the public water system roadway valve, controlling the water supply for automatic sprinkler systems up to an including the back flow prevention device shall be electrically supervised as required by 2015 International Fire Code section 903.4.
14. Provide the means to conduct a full forward flow testing of the backflow prevention device as required by 2013 NFPA 13 section 10.10.2.5.1.
15. Provide information on any hydrants to be installed; private hydrants to have the barrels painted red. The available flow to be marked on the hydrant bonnet and caps to meet NFPA 291.

## Required Inspections and Documents

Testing and acceptance will be required to meet 2013 NFPA 24 section 10.10 requirements. Items to be reviewed or inspected include: **1)** Inspection of piping and restraint system before covering, **2)** Flushing of piping. Flow rate to meet NFPA 24 section 10.10.2.1.3, **3)** Hydrostatic test as required by NFPA 24 section 10.10.2.2, **4)** Underground material and test certificate, **5)** Private hydrants shall be flushed and flow tested, **6)** Flow rates to be marked on the hydrant with an approved method, **7)** Final inspection. Additional testing may be required based on system or complexity.

## Pre-Final Inspection Checklist

The contractor shall verify completion of the following items, any item from this list found outstanding at the time of the final will result in termination of the inspection and assessment of a re-inspection fee.

- All previous inspections completed and any deficiencies corrected.
- Installation per the submitted prints or deviations approved and as-built drawings prepared for inspector.
- Permit, stamped drawings, plan review comments, and 3 copies of the Certificate of Underground Piping on site.

## Request for review and permit

I understand and agree that this permit is only for this project and provides authorization for the limited scope of work identified on the permit and the permit remains the property of the City of Charleston. By signing below I certify that I am an authorized agent for the company performing the work stated above, appropriately trained and qualified for the scope of work proposed, and all information provided is true and correct. I understand that if any information provided is found to be incorrect or falsely stated that any permits granted from this application are immediately null and void. I agree to comply with the ordinances of this jurisdiction and to perform the work herein stated in accordance with the submitted plans, specifications, applicable codes and standards, and shall be responsible for any and all violations of state laws and local ordinances. I understand that any alternation or change in plans made without written approval subsequent to the issuance of the permit shall constitute grounds for revocation of such permit and that all work is subject to field inspections. Permit void if work is not started within six months of the date of issue or if work stops for a period of six months. All permits expire two years from the date of their issuance. Additional permits shall be required for any additional work not authorized under a permit issued for this application. Applicant is responsible for calling to schedule all required inspections.

\_\_\_\_\_  
Name of person making application

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date