

# Water Based Fire Protection including Automatic Fire Extinguishing Systems Construction Permit Application



Greensboro Fire Department  
Fire and Life Safety Division  
300 W. Washington Street  
Greensboro, NC 27401  
(336) 373-7929

<http://www.greensboro-nc.gov/firepermits>



## Note

Updated 07/01/2023

A construction permit is required for installation of or modification to an automatic fire-extinguishing system. A construction permit is also required for installation or modification from service of a standpipe system, private fire hydrants or fire pumps and relatable equipment. This permit shall be used for work associated with Fire Pumps, Private Fire Hydrants, Sprinkler Systems, Standpipe Systems, and Relatable Equipment (i.e. Generator, Jockey Pumps, Controllers, etc.). This permit is a stand-alone permit and requires all documents to be submitted separate from a building/site plan.

### Guilford County Schools

All Guilford County School fire permits, building plans, and Technical Review Committee (TRC) site plans will now be reviewed by Guilford County Fire Marshal's Office. Here is their website for more information:

<https://www.guilfordcountync.gov/our-county/emergency-services/fire-division/guilford-county-fire-marshal-office/building-fire-system-plan-reviews/-fsiteid-1>

## How do I submit for a Greensboro Fire Permit?

1. Go to [www.greensboro-nc.gov/firepermits](http://www.greensboro-nc.gov/firepermits) and download the applicable permit application(s) for your project.
2. On the applicable permit application, see the *Requirements for Fire Permitting and Inspection* section.
3. If a fire permit is required for your scope of work, combine the permit application and required documents into a single PDF and submit them at [www.greensboro-nc.gov/PlanReviewandTracking](http://www.greensboro-nc.gov/PlanReviewandTracking) (you will need to create a login). Once at your dashboard you will need to select "New Request." Enter the requested information and submit your plan.
4. We then receive the submittal and verify the fees are correct. You will then receive notification via email and your dashboard for payment. You can pay from your dashboard by clicking the "\$" beside your plan or by clicking the link in the email.
5. Once you pay online by credit/debit card, your submittal will go into the review queue. If the plan doesn't require payment we will confirm no fee is required and then add the plan to the queue.
6. Once your plan is reviewed, you will be able to resubmit a revision or download the approved set of plans directly from the website. Look in the comments section of your submittal for more information.
7. Once your permit has been approved, you will be able to download the approved and stamped set directly from the website. You may then call (336) 373-7829 to schedule a Fire inspection. An approved stamped set of paper plans shall be on site.

## Requirements for Fire Permitting and Inspections

Any work that is not addressed in this section does not currently require a fire permit or inspection. However, all work associated with NC Fire Code is still required to meet the applicable code requirements. All work items associated with the scope of work can be submitted together with one application.

- **New Systems-** *ALL properties (that are subject to NC Fire Code)*
  - **All new sprinkler systems**= Permit submittal required – see below for documents required (\$150) / Inspection Required (\$150)  
**Required documents:**
    - Completed permit application
    - Hydrant flow test document and peak demand flow curve document (both completed within the last year) from Greensboro Water Resources (336-373-2033)
    - Floor plan including layout and arrangement plan (NICET 3 or 4)
    - Site plan with underground piping and related components including fire hydrant locations
    - Name of manufacturer of system and cut sheets
    - Fire pump test report (if associated with project)
    - Hydraulic calculations (10% safety factor required)
  - **All new standpipe systems (Not associated with a sprinkler system)**= Permit submittal required – see below for documents required (\$150) / Inspection Required (\$150)  
**Required documents:**
    - Completed permit application
    - Hydrant flow test document and peak demand flow curve document (both completed within the last year) from Greensboro Water Resources (336-373-2033)
    - Floor plan including layout and arrangement plan (NICET 3 or 4)
    - Site plan with underground piping and related components including fire hydrant locations
    - Name of manufacturer of system and cut sheets
    - Fire pump test report (if associated with project)
    - Hydraulic calculations (10% safety factor required)
  - **All new fire pumps**= Permit submittal required – see below for documents required (\$150) / Inspection Required (\$150)  
**Required documents:**
    - Completed permit application
    - Name of manufacturer of system and cut sheets for the pump
    - Fire pump test report
    - Hydraulic calculations (10% safety factor required)
    - New hydrant flow test document and peak demand flow document (both completed within the last year) from GSO Water Resources (336-373-2033)
    - Site plan with underground piping and related components including fire hydrant locations
  - **All new backflow preventers (Not associated with a sprinkler system)**= Permit submittal required – see below for documents required (\$150) / Inspection Required (\$150)  
**Required documents:**
    - Completed permit application
    - Name of manufacturer of system and cut sheets
    - Hydraulic calculations for system (10% safety factor required)

- New hydrant flow test document and peak demand flow document (both completed within the last year) from GSO Water Resources (336-373-2033)
- Site plan with underground piping and related components including fire hydrant locations

- **All new fire hydrants**= Permit submittal required – see below for documents required (\$150) / Inspection Required (\$150)

**Required documents:**

- Completed permit application
- Cut sheets for components
- New hydrant flow test document and peak demand flow document (both completed within the last year) from GSO Water Resources (336-373-2033)
- Site plan with underground piping and related components including fire hydrant locations

- **All new valves (Not associated with a sprinkler system)**= Permit submittal required – see below for documents required (\$150) / Inspection Required (\$150)

**Required documents:**

- Completed permit application
- Name of manufacturer of system and cut sheets
- Hydraulic calculations for system (10% safety factor required)
- New hydrant flow test document and peak demand flow document (both completed within the last year) from GSO Water Resources (336-373-2033)
- Site plan with underground piping and related components including fire hydrant locations

- **Existing Systems** - *ALL properties (that are subject to NC Fire Code)*

- **Sprinkler head replacements: 4 or less “like for like” sprinkler head replacements** = No plan submittal required (\$0)/ Inspection Required (\$150) **\*NOTE** - old sprinkler heads must remain on-site for inspection by Fire Inspector  
**\*Any** head replacement (painted heads, corroded heads, etc.) will fall under these requirements

- **Sprinkler head replacements: 5 or more “like for like” sprinkler head replacements** = Submit permit application and cut sheets for new heads for review (\$150)/ Inspection Required (\$150) **\*NOTE** - old sprinkler heads must remain on-site for inspection by Fire Inspector  
**\*Any** head replacement (painted heads, corroded heads, etc.) will fall under these requirements

- **Sprinkler System Modifications: Additions, deletions, or relocations of 4 or less sprinkler heads** = No plan submittal required (\$0)/ Inspection Required (\$150)

- **Sprinkler System Modifications: Additions, deletions, or relocations of 5 or more sprinkler heads** = Plan submittal required – see below for documents required (\$150) / Inspection Required (\$150)

*Example: Add 2 heads, delete 2 heads, relocate 1 head = Plan submittal required*

**Required documents:**

- Completed permit application
- Floor plan including layout and arrangement plan (NICET 3 or 4)
- Cut sheets for sprinkler heads and components

-Hydraulic calculations (10% safety factor required) (hydraulic calculations only required if adding 5 or more heads)

- **Fire pump replacement/relocation-** Plan submittal required – see below for documents required (\$150) / Inspection Required (\$150)

**Required documents:**

- Completed permit application
- Name of manufacturer of system and cut sheets for the pump
- Fire pump test report
- Hydraulic calculations (10% safety factor required)
- New hydrant flow test document and peak demand flow document (both completed within the last year) from GSO Water Resources (336-373-2033)
- Site plan with underground piping and related components including fire hydrant locations

- **Backflow preventer (Associated with a sprinkler system)=** Plan submittal required – see below for documents required (\$150) / Inspection Required (\$150)

**Required documents:**

- Completed permit application
- Cut sheet for current backflow preventer
- Cut sheet for proposed backflow preventer

**Possible other required documents (if the proposed appliance increases friction loss):**

- Hydraulic calculations for system (10% safety factor required)
- New hydrant flow test document and peak demand flow document (both completed within the last year) from GSO Water Resources (336-373-2033)
- Site plan with underground piping and related components including fire hydrant locations

- **Private fire hydrant replacement-** Plan submittal required – see below for documents required (\$150) / Inspection Required (\$150)

**Required documents:**

- Completed permit application
- Cut sheets for components
- Show on plan compliance with NFPA 24 and Greensboro Municipal Code 10-25
- Site plan with underground piping and related components including other fire hydrant locations

- **Valve replacement/relocation (Associated with a sprinkler system)=** Plan submittal required – see below for documents required (\$150) / Inspection Required (\$150)

**Required documents:**

- Completed permit application
- Cut sheets for valve and components

**Possible other required documents (upon request by plans examiner):**

- Hydraulic calculations for system (10% safety factor required)
- New hydrant flow test document and peak demand flow document (both completed within the last year) from GSO Water Resources (336-373-2033)
- Site plan with underground piping and related components including fire hydrant locations

- **Air Compressor Replacement-** Plan submittal required – see below for documents required (\$150) / Inspection Required (\$150)

**Required documents:**

- Completed permit application

-Cut sheets for compressor

- **Standpipe System modifications-** Plan submittal required – see below for documents required (\$150) / Inspection Required (\$150)  
*Example: Standpipe being relocated or altered from the original design.*  
**Required documents:**
  - Completed permit application
  - Hydrant flow test document and peak demand flow curve document (both completed within the last year) from Greensboro Water Resources (336-373-2033)
  - Floor plan including layout and arrangement plan (NICET 3 or 4)
  - Site plan with underground piping and related components including fire hydrant locations
  - Name of manufacturer of system and cut sheets
  - Fire pump test report (if associated with project)
  - Hydraulic calculations (10% safety factor required)
  
- **\*Flow/Tamper Switch Device Like for Like replacements, additions, deletions, or relocations-** Will need to be submitted under the Fire Alarm and Detection Systems permit application. Requirements for these items are listed there under Existing Fire Alarm Systems.
  
- **Removal of a sprinkler system, standpipe system, fire pump, backflow preventer, private hydrant, or any valves-** Submit permit application, Appendix B, and Life Safety Plan (\$150) / Inspection Required (\$150)

## Required Fire Inspections

- Above ceiling inspection (Sprinkler system)
- Main underground flush for new risers \*post chlorination test\* (Sprinkler System)
- Final inspection on system and/or components
- **Fire Inspections Scheduling Line- Call 336-373-7829**

\*\*\*Underground inspections and chlorination tests performed by Greensboro Water Resources (336-373-2033)\*\*\*

## Fee Schedule

(Please note that permit review fees are paid for separately from the inspection fees)

Permit Review Fees <small>(This fee is paid online prior to your permit/plan being reviewed)</small>	Inspection Fees <small>(This fee is billed to you by Fire Recovery USA after each inspection)</small>
<ul style="list-style-type: none"> <li>• <b>Sprinkler Head Replacement Review:</b> \$150</li> <li>• <b>Sprinkler System Review (existing system):</b> \$150 riser</li> </ul>	<ul style="list-style-type: none"> <li>• <b>All Water Based Fire Protection Inspections:</b> \$150 per visit (up to 3 hours), \$150 each additional hour</li> </ul>

<ul style="list-style-type: none"> <li>• <b>Sprinkler System Review (new system):</b> \$150 per building/riser of work area</li> <li>• <b>Private Fire Hydrants Review (not associated with a sprinkler system review or TRC review):</b> \$150</li> <li>• <b>Fire Pump Review (new or replacement):</b> \$150</li> <li>• <b>Valve Replacement Review:</b> \$150 per building</li> <li>• <b>Standpipes Review (new systems not associated with a sprinkler system review):</b> \$150 per system</li> </ul> <p><b>All other reviews:</b> \$150 each</p>	<ul style="list-style-type: none"> <li>• <b>If additional inspectors are required:</b> \$150 per hour for each inspector.</li> </ul>
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**Application Information**

Applicants Name (Person):	Phone:	Email:
Applicants Company Address:		Applicants Company Name:
Project Name:	Project Address:	

**SCOPE OF WORK:**

<input type="checkbox"/> New Facility <input type="checkbox"/> Existing Facility	Building Permit Number (if applicable):
Sq. Ft. of Work Area:	Fire Extinguishing Systems: <input type="checkbox"/> Full <input type="checkbox"/> Part <input type="checkbox"/> None
Sq. Ft. of Building:	Fire Alarm System: <input type="checkbox"/> Full <input type="checkbox"/> Partial <input type="checkbox"/> None
Building Occupancy Classification(s): Examples: B,M, F, S-1, H-3	Number of Floors (entire building): Floors in scope of work:
Basement: <input type="checkbox"/> Yes <input type="checkbox"/> No	Number of Sprinkler risers affected by scope of work:

Is the facility reporting hazardous material under SARA Title III Federal Requirments:  Yes    No

**DISCLAIMER**

**This is an application to submit for a permit. Submittal of this document does not guarantee a permit. No occupancy can occur prior to receiving an inspection. Final fire permit approval will occur during the on-site inspection if no violations are present.**

**By submitting this permit application you agree to the following:**

**I hereby certify that all information in this application is correct and all work will comply with the State Building Code and all other applicable State and local laws and ordinances and regulations. The Inspection Department will be notified of any changes in the approved plans and specifications for the project permitted herein.**

This permit will expire 6 months after the date of issuance if the work authorized by the permit has not commenced. A fire inspection shall be requested within those first 6 months of permit issuance to verify work has commenced or the permit immediately expires. If, after commencement and initial fire inspection, the work is discontinued for a period of 12 months, the permit immediately expires. A fire inspection shall be requested within each 12 month period after the first 6 months of permit issuance, to verify work is continuing, or the permit immediately expires. No work authorized by a permit that has expired may be performed until a new permit has been issued.