



# GOLDER RANCH FIRE DISTRICT

## GRFD Fire Code Standard 901 Pre-Application/Construction Acknowledgements

<b>Pre-Construction/Pre-Application Fire Code Requirements</b> <b>Permit Applicant Acknowledgments Based on IFC Latest Edition</b> This document is provided to inform the applicant of some common fire code provisions required by the Fire Code Official. This document shall not be deemed to nullify any provisions of local, state, or federal law, regulation, code, or requirements. These comments shall not be meant as all inclusive of fire code requirements pertaining to this project.		
<b>Permit #:</b>	<b>Date:</b>	
<b>Project Name:</b>		
<b>Project Address:</b>		
<b>Applicant:</b>	<b>Contact Phone #:</b>	
<b>Property Owner:</b>	<b>Contact Phone #:</b>	
<b>Architect, Engineer, Designer:</b>	<b>Contact Phone #:</b>	
<b>Project Description:</b>		
<b>Is this permit for a shell building?</b>	<b>Is there more than a single tenant?</b>	
<b>Provide the contractor's contact information if known at this time:</b>		
<p>An applicant's written response and acknowledgment to each of the items within GRFD Fire Code Standard 901 shall be provided with the Building Permit Application. The applicant completing this form shall be the owner of the property or the owner's authorized representative. The applicant's written response and acknowledgment to each item may be directly on this form or may be provided separately with references to each numbered item, 901.1 through 901.19. The minimum requirement is to fill out all above boxes, sign below, and initial that each item below has been acknowledged.</p> <p style="text-align: center;"><b><u>A copy of this completed form shall be provided to the project superintendent prior to commencing any permitted work.</u></b></p>		

Applicant Signature: \_\_\_\_\_

(Owner of the property or the owner's authorized representative)

Print Name: \_\_\_\_\_ Date: \_\_\_\_\_



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### 901.1 Water Supply & Fire-Flow

The Building Permit Application construction documents shall include a copy of an approved, signed water plan for the project. The Building Permit Application can not be issued until the water plan is approved and attached to the construction documents. There shall be no combustible materials or combustible construction offices located onsite without approved hydrants installed. Hydrants shall be tested, in-service and capable of providing a minimum of 1,500gpm. The required fire flow shall meet the requirements as specified in IFC Table B105.1.

New fire hydrants shall be installed in accordance with AWWA Standards or NFPA 24 (the most current edition). Inspections are required for a fire line flush, pressure test of 200 psi for two (2) hours with no pressure loss. A Contractor's Test and Materials Certificate or other approved form shall be submitted to the Fire Code Official per IFC Latest Edition.

- The fire flow provided for this project is \_\_\_\_\_ GPM for a \_\_\_\_\_ hour duration. \_\_\_\_\_ hydrants are provided in this project.
- Fire hydrants connected to an approved water supply of 1,000gpm for fire protection, shall be installed and in service prior to combustible material delivery to the site. **Temporary construction office trailers are considered combustible materials.**
- One and two family dwellings and townhouses which exceed 3,600sf in fire-flow calculation area hereafter constructed within or moved into the jurisdiction shall provide fire flow in accordance with IFC Table B105.1.
- A blue reflective street marker shall be installed at each hydrant location.
- The bottom of the large diameter hose outlet shall be not less than 18 inches above the final grade.
- A three foot clear space shall be maintained around the circumference of all fire hydrants.
- Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall be provided in accordance with the IFC.
- All out of service hydrants shall be clearly marked or tagged as out of service. While the water lines are undergoing bacteriological cleansing and or testing, the hydrants shall be marked as "Out of Service". This shall remain until the hydrant has been inspected by the developer and approved by the water purveyor and declared "Back in Service". The water purveyor will notify the GRFD Fire Marshal when the hydrant(s) are in service and available for fire flow testing.



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### **901.2 Fire Apparatus Access**

No combustible materials or combustible construction offices shall be located onsite until an approved all weather access is provided. All-weather access shall be capable of supporting the imposed loads of fire apparatus, at least 82,000 pounds. If surface is not final paving, an engineering report for the temporary surface may be required. A minimum base of an AB material four inches thick compacted to 95% shall be provided.

### **901.3 Construction Site Plans**

No combustible materials or combustible construction offices shall be located onsite until an approved basic construction site plan is provided. This plan shall indicate the material lay-down yard location, all fencing, gates and locks, mobile storage or office trailers, fire apparatus access routing, and a 24hour contractor contact number. Gated, secured construction sites shall provide an approved fire department padlock on the chain securing the site and a sign indicating "FIRE ACCESS" shall be posted on the gate. The approved fire department padlock can be obtained from a fire inspector. All structures under construction shall be clearly identified at all times with an approved address and building number.

### **901.4 Fire Department Key Box**

A fire department key box shall be located adjacent to each fire department connection (FDC) and indicated on the plans. An approved fire department key box shall be obtained and installed at an accessible approved location for each structure or group of structures as approved by the fire code official. The primary location for fire department key box mounting is adjacent to the sprinkler system riser. Secondary key boxes may be required at the opposite sides of buildings when they are large and grouped without separation. Ordering forms may be obtained through the fire code official. Door keys shall be provided and maintained in the key box as to provide access to all structures and tenant spaces mechanical/electrical rooms and common areas for fire-fighting and life-saving purposes.

### **901.5 Construction Document Cabinet**

Construction document cabinets may be required for every building. The construction document cabinet shall contain a copy of the approved construction documents, including all "as-built" documents, indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, fire-fighting equipment and fire department access. The construction document cabinet may be a Knox cabinet or other durable, lockable cabinet as approved by the fire code official. The cabinet shall be sized to hold the contents indicated above. Large buildings may require additional cabinets. The construction document cabinet shall be located adjacent to the automatic sprinkler system riser or in the fire command center where provided.



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### 901.6A Automatic Fire Sprinklers - Commercial

Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section. **THROUGHOUT ALL GROUP A, B, E, F, H, I, M, R AND S OCCUPANCIES FOR EVERY FACILITY, BUILDING OR PORTION OF A BUILDING HEREAFTER CONSTRUCTED WITHIN OR MOVED INTO THE JURISDICTION.**

- Water supplies for automatic sprinkler systems shall comply with the International Fire Code (IFC chapter 5).
- Fire line connections shall be indicated on the water plan.
- The potable water supply shall be protected against backflow in accordance with the requirements of the International Plumbing Code (IPC) and the IFC.
- Backflow prevention devices shall be listed for fire protection service. Backflow prevention devices for automatic sprinkler systems may be installed internally as part of the riser or externally as part of the supply line.
- Exterior backflow prevention device shutoff valves shall be locked in the open position. All backflow prevention valves shall be electrically supervised by a tamper switch in accordance with NFPA 72 and annunciated by the sprinkler system monitoring control panel.
- The automatic sprinkler system design criteria shall be provided with the building permit application documents. The automatic sprinkler system layout or shop drawings and hydraulic calculations may be submitted deferred as a future revision of the building construction permit provided that this project is not a tenant improvement. If deferred, include "Automatic Sprinkler System Shop/Layout Documents" in the Deferred Submittal List. **Automatic sprinkler system risers and control valves shall be installed within a building within a dedicated room having an exterior door leading directly into the riser room.**
- The door shall be equipped with an approved sign indicating, "Riser Room". Where an automatic sprinkler system is installed in a multi-tenant building, the riser shall be installed within an enclosed room that can be accessed without requiring entry into a tenant space. The interior location of the automatic sprinkler system riser shall be illuminated and provided with emergency power supply. A backflow prevention assembly is required. GRFD Standard 903 can provide further guidance for automatic sprinkler system requirements. Fire sprinkler systems are required to be electronically monitored through an approved central station.



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### **901.6B Automatic Fire Sprinklers – Residential**

All newly constructed single family homes shall provide the required fire flow in accordance with the IFC, Chapter 5 and Appendix B. Homes that are not able to produce and provide the required fire flow shall be equipped throughout with an automatic fire sprinkler system in designed and installed in accordance with the National Fire Protection Association's Standard #13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", the latest edition.

All newly constructed sub-divisions having only one fire apparatus access roadway serving thirty (30) or more homes shall require all homes built therein to be equipped with an approved residential fire sprinkler system. The system shall be designed and installed in accordance with the National Fire Protection Association's Standard #13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes", the latest edition.

Additions to existing homes not capable of providing or producing the required fire flow shall require the installation of an approved residential fire sprinkler system. The system shall be designed and installed in accordance with the National Fire Protection Association's Standard #13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes" the latest edition. Exceptions may be made, considering alternative fire protection measures, if approved by the GRFD Fire Marshal.

Multi-family residential projects having more than 100 dwelling units shall be equipped throughout with two-separate and approved fire apparatus access roadways. Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including non-residential occupancies, are equipped throughout with approved automatic fire sprinkler systems, installed in accordance with the National Fire Protection Association's Standard #13R, "Standard for the Installation of Sprinkler Systems In Low-Rise Residential Occupancies" the latest edition.

### **901.7 Automatic/Manual Fire alarm Systems**

Where a fire alarm system is required or provided, the fire alarm system design shall be provided with the building permit application documents. Candela ratings shall be provided for each visual notification device. The fire alarm system layout or shop drawings and manufacture's cut sheets may be submitted deferred as a future revision of the building construction permit provided this is not a tenant improvement project. If deferred, include "Fire Alarm System Shop/Layout Documents" in the Deferred Submittal List. Fire Alarm Systems shall be in compliance with NFPA 72 Latest Edition and GRFD Standard 909.



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### **901.8 Fire Protection Systems Supervision & Monitoring**

Automatic fire sprinkler systems and fire alarm systems shall be electronically supervised and monitored by an approved central station, proprietary supervising station, or remote supervising station. Supervision/monitoring system layout or shop drawings may be submitted deferred with the automatic sprinkler system shop/layout documents, or the fire alarm system shop/layout documents, or separately as a future revision of the building construction permit. If separately deferred, include "Fire Protection Supervision/Monitoring System" in the Deferred Submittal List. Fire protection system supervision/monitoring shall be in service prior to acceptance testing and inspection of the system

### **901.9 Portable Fire Extinguishers**

Fire extinguishers shall be installed and located as indicated by IFC. Where a building is divided into tenant spaces, there shall be fire extinguishers within each tenant space. If extinguishers are not indicated on a plan sheet, the location and number of extinguishers shall be as determined by the GRFD Fire Inspector and installed prior to C of O inspection. Fire extinguishers shall be classified at a minimum of 2A10BC containing at least 4.5 pounds of dry-chemical agent. Fire extinguishers shall be serviced and tagged by a reputable service company prior to units being displayed for public use. Fire extinguishers shall be wall mounted at least so that the bottom of the unit is more than 4" above the level of the floor and no more than five feet to the top of the unit.

### **901.10 Building Identification**

Indicate the installation location of each building address on the building permit application plan set. Indicate address height and stroke. In multi tenant buildings, each tenant space shall be labeled with a tenant suite number at the front and rear doors. Tenant numbers shall be applied prior to locking any doors.

### **901.11 Building Access**

Exterior doors and openings shall be maintained readily accessible for emergency access by the fire department. Locks and latches shall have exterior hardware permitting emergency operation by the fire department. Exterior doors shall not be locked unless the fire department key box is installed and contains keys to each locked door; this includes locked doors during construction.

### **901.12 Fire Apparatus Access Lanes**

All fire apparatus access lanes less than 26 feet wide shall be posted on both sides with signage indicating, "Fire Lane - No Parking". Signage and markings shall be in accordance with fire code section D103.6. If fire apparatus access lanes are not indicated on a plan sheet, access lane markings and signage shall be as indicated by the fire inspector and installed prior to a "Certificate of Occupancy" inspection. Temporary fire apparatus access markings may be required during construction as determined by a fire inspector.



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### **901.13 Security Gates**

The installation of security gates across a fire apparatus access road shall be approved by this office. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

### **901.14 Fire Safety and Evacuation Plan**

An approved fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings: Group A; Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge; Group E; Group H; Group I; Group R-1; Group R-2; Group R-4; Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge; High-rise buildings; Multi-Tenant Commercial buildings exceeding 18,000 gross square feet; Underground buildings; Buildings with an atrium and having an occupancy in Group A, E or M. Prior to final construction inspections, fire safety and evacuation plans shall be provided. Fire safety and evacuation plan contents shall be in accordance with IFC Sections 404.3.1 and 404.3.2. The fire safety and evacuation plans shall be distributed to all tenants and building service employees. Tenants shall distribute to their employees applicable parts of the fire safety plan affecting the employees' actions in the event of a fire or other emergency.

### **901.15 As-Built Documents**

When approved changes have been made during installation "As-Built" plans shall be submitted prior to the "Certificate of Occupancy" being issued. Minor changes approved by the code official can be hand drawn on a copy of the original approved plans and a minimum of three copies submitted for re-approval and re-stamping. Major changes shall be re-drafted and new plans submitted for approval. The fire code official shall have the discretion to establish the level of changes, minor or major.

### **901.16 Electronic Construction Documents**

A full set of approved construction documents, including any as-built construction documents, may be required as an electronic file. The electronic file may be a Portable Document Format (PDF) and stored on a CDROM disk. Electronic construction documents may be submitted prior to "Certificate of Occupancy" issuance at the request of the fire code official.

### **901.17 Approved Fire Codes and Standards**

International Fire Code (IFC) latest edition with local amendments  
National Fire Protection Standards as outlined in the IFC Chapter 80



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### **901.18 Work Commencing Prior to Permit Issuance**

Any person who commences work, activity, or operation regulated by the IFC before obtaining the necessary permits shall be subject to 500 percent of the usual fire code permit fees, which shall be in addition to the required permit fees. The payment of such fees shall not exempt an applicant from compliance with all other provisions of this code and/or other ordinances and requirements nor from any penalties prescribed by law. All work shall cease until the required permits are obtained.

### **901.19 Fire Code Inspection Schedule**

All fire code inspections shall be scheduled through the fire inspection hotline at (520) 825-5959. Normal inspection hours are Monday through Thursday, 0730 hours to 1700 hours. On Fridays from 0800 hours to 1200 hours. After-hour fire inspections can be scheduled, however, a fee may be charged. Inspections requests will be scheduled as soon as possible and are on a first-come first-served basis. Requestors should allow for at least one full day between the request and the inspection. The fire inspector assigned to a project will conduct all inspections from beginning to end with only minor exceptions.