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| REVIEW OF NEW SPECIFICATION OR SPECIFICATION CHANGE  | Fire Protection Plan - 2 |
| **Specification Section No.:** Special Construction Requirements | **Item:** Fire Protection Plan |
| **Originating Office:** Project Development Branch | **By:** Brinck/Lacey |
| **Date Sent For Review:** Aug 4, 2017  | **Date Comments Due: Aug 18, 2017** |
| Submit response to: STANDARDS AND SPECIFICATIONS UNIT, DIVISION OF PROJECT SUPPORT 4TH FLOOR, CDOT HEADQUARTERS |
| **Vote****/N** | **Concurrent Reviews – Others Commenting** | The attached Draft Specification is submitted for your review and comments. If not returned by Date Comments Due, the draft specification will be considered to be approved unless the Standards and Specifications Unit of the Project Development Branch [(303) 757-9474, (303) 757-9402] is advised otherwise.**REMARKS:** If these proposed changes are approved, our unit will issue these in a revised version of this standard special provision, for use with the 2011 and 2017 editions of the Standard Specifications. |
|  | **Spec Committee Members:** |  **✓** |
|  | Co-Chairman: Lacey |  |
|  | Region 1: Quirk |  |
|  | Region 1: Lucerna |  |
|  | Region 2: Phillips |  |
|  | Region 3: Jean |  |
|  | Region 4: Boespflug |  |
|  | Region 5: Valentinelli |  |
|  | Project Development: Vacant |  |
|  | Specifications: Brinck |  |
|  | Bridge: Hasan |  |
|  | Contracts & Market Analysis: Eddy |  |
|  | Materials: Schiebel |  |
|  | Traffic Engineering: Matthews |  | REVIEWER COMMENTS:( ) Approved ( ) Disapproved ( ) ModifiedIf disapproved or modified, give reason why and show any modifications on the attached draft copy: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Name/Signature Date |
|  | Maintenance: Weldon |  |
|  | FHWA: Larson |  |
|  | Attorney General: Milan |  |
|  |  |  |
|  | **Others:** |  |
|  | Colorado Contractors Assoc.: Moody |  |
|  |  |  |
|  | **Technical Committees:** |  |
|  | PDAC |  |
|  | Drainage Advisory Committee (DAC) |  |
|  | Water Quality Advisory Committee (WQAC) |  |

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| **COLORADO DEPARTMENT OF TRANSPORTATION****SUBMITTAL OF NEW SPECIFICATION OR SPECIFICATION CHANGE** | Log No. (Assigned by Standards and Specifications Unit)Fire Protection Plan - 2 |
| TO: Standards & Specifications Unit Project Development Branch | FROM:Mark Semonisck, HQ OTS / RM / LC(Region, Branch or Technical Committee) |
| SPECIFICATION SECTION NO.Fire Protection Plan | ITEM:Special Construction Requirements Fire Protection Plan | PriorityRoutine Fast |
| Reason for this new or changed specification:Changes adapting to high and increasing ROW/wildland fire potential from CDOT/contractor work activities due to extremely dry grasses, dry/dead forest, and hot/windy climate conditions; including responding to formal'red-flag' warnings. The following are recent state & national events considered and prompting changes:1. Mower malfunction caused Spring Glade Fire (7/23/17 - 371 acres burned)

UPDATE 7/24: Investigators determined Monday the Spring Glade Fire was caused by hot metal due to a mechanical failure in mowing equipment, according to Loveland Fire Rescue.1. Car crash ignites 5,000-acre brush fire in California (6/27/17 - 5,000 acres burned, 300+ emergency workers) The blaze was first reported at around 3 p.m. after a single-car crash near Lamb Canyon sparked a 30-acre fire that quickly began to spread at a "critical rate,” officials said.
2. Beulah Fire - Pueblo County CO (10/3/16 - 5,000 acres burned, 14 structures)

[(alleged CDOT) using heavy equipment to dig in a rocky area Monday afternoon when officials believe sparks ignited the wild fire. High winds quickly spread the fire...]Reference: https://inciweb.nwcg.gov/0/ (Active nationwide wildfires, including CO - Human & Nature caused) |
| New or Revised Specification:NOTE: The following modifications have been made to the existing sample project special provision to conform to [Policy Directive PD7.1](http://intranet.dot.state.co.us/resources/policy-procedure/documents/0007-1):1. (a)(3) Added on-line references for active Red-flag or other local fire alerts for pre-planning.
2. (a)(6) Expanded list of possible fire causes for plan development reference
3. (a)(9) Added requirement/details for Burn Permit Procedure
4. (b)(1) Added details for required Fire Boxes appearance, maintenance
5. (b)(2) Added details for work activities beyond just welding.
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| NOTE: See Procedural Directive 513.1 for a description of appropriate specification development procedures. |

August xx, 2017

SPECIAL CONSTRUCTION REQUIREMENTS

FIRE PROTECTION PLAN

**NOTICE**

This is a standard special provision that revises or modifies CDOT’s *Standard Specifications for Road and Bridge Construction.* It has gone through a formal review and approval process and has been issued by CDOT’s Project Development Branch with formal instructions for its use on CDOT construction projects. It is to be used as written without change. Do not use modified versions of this special provision on CDOT construction projects, and do not use this special provision on CDOT projects in a manner other than that specified in the instructions unless such use is first approved by CDOT’s Standards and Specifications Unit. The instructions for use on CDOT construction projects appear below.

Other agencies which use the *Standard Specifications for Road and Bridge Construction* to administer construction projects may use this special provision as appropriate and at their own risk.

**Instructions for use on CDOT construction projects:**

Use this project special provision on all projects, except those in urban areas and along irrigated farm land, as determined by the Resident Engineer.

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SPECIAL CONSTRUCTION REQUIREMENTS

FIRE PROTECTION PLAN

(a) *Fire Protection Plan*. Prior to start of work, the Contractor shall submit a Fire Control Plan in writing to the Engineer for approval. The Plan shall include the following:

1. The name and contact information of a Fire Control Coordinator who shall be assigned to the project.
2. A list of numbers to call in case of a fire, including 911 (or the equivalent in the area).
3. Local agency or Fire District concerns and other ongoing concerns which may be involved shall be identified and special notices, restrictions, evacuation guides, or requirements included in the plan. (i.e. <https://gacc.nifc.gov/rmcc/>, <http://www.elkcreekfire.org/ECFD/Welcome.html> )

**NOTE: Colorado Red Flag Alerts** - Review required daily prior to start of all work. <http://www.coemergency.com/p/fire-bans-danger.html> )

1. A complete list, including storage locations, of all tools and equipment the Contractor will use in the event of a fire within project limits.
2. Methods that will be employed if a fire is encountered or started during construction activities within the project limits.
3. Specific fire prevention precautions, and the required firefighting equipment, for each activity which has the potential for starting a fire. At a minimum the plan shall address prevention planning related to use of the following:
	* 1. Open flames/spark producing tools, equipment, activities, static discharge
		2. Flammable and/or combustible materials handling and storage
		3. Prohibited Smoking
		4. Vehicle access and parking off-pavement
		5. Traffic Control (crashes may ignite fire)
		6. Lightning / Weather / Seasonal
		7. Excessive dry Timber Situations (beetle kill prevalent)
4. Specific precautions for fueling operations.
5. Provisions for field safety meetings. The Contractor shall conduct field safety meetings (also known as toolbox or tailgate meetings) at least once per week. The Contractor shall encourage participation by all persons working at the project site. Participants shall discuss specific fire prevention precautions for construction activities.
6. As determined by the Fire Control Coordinator, the Contractor shall establish formal Burn Permit Procedure and level of documentation needed for routine, longer-term activities such as open flame or spark-producing activities and materials storage areas and at a minimum to include:
7. Determine allowable permit time & dates limits
8. Describe area of potential impact
9. Fire hazard mitigation before & during work
10. Compliance inspections requirement (pre-work)
11. Pre-work briefings

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SPECIAL CONSTRUCTION REQUIREMENTS

FIRE PROTECTION PLAN

1. Location and ready status of Fire Boxes
2. Dedicated fire watch
3. Post work fire watch (60 minutes after work complete)

(b) *Equipment and Procedures*.

1. Fire Boxes. Fire boxes shall contain tools and equipment that shall be used exclusively for controlling or suppressing fires which occur due to construction activities on project sites. Fire boxes shall be highly visible, located and maintained in ready-status, as close as practical to the work location. Each fire box shall contain, as a minimum, the following:
2. five round-pointed shovels,
3. two double-bitted axes,
4. three pulaskis or mattocks, and
5. two backpack pumps
6. Open flame, grinding, cutting or welding. If welding at field locations is required, the activity shall be done at a location where all flammable material has been cleared away for a distance of 16 feet around the area.
7. Spark Arrestors. All diesel and gasoline powered engines, both mobile and stationary, shall be equipped with serviceable spark arrestors.
8. Power Saws. Each gasoline power saw shall be provided with a spark screen and a muffler in good condition. Spill-proof metal safety cans shall be used for refueling.
9. Storage and Parking Areas. Batch plant areas, equipment service areas, parking areas, gas and oil drum storage areas, and explosive storage areas shall be cleared of all flammable materials for a distance of 50 feet. Small stationary engine sites shall be cleared of all flammable material for distance of 17 feet. Other mitigation methods may be used as approved by the Engineer

(c) *Fire Control Coordinator Responsibilities.* The Fire Control Coordinator shall:

1. Implement the Fire Control Plan.
2. Monitor, manage, and adjust the Fire Control Plan as needed as construction work progresses.
3. Document in a letter to the Engineer changes to the Fire Control Plan.
4. Immediately contact firefighting authorities when a fire is started due to construction activities within project limits.
5. Coordinate fire control and suppression activities until authorities arrive, including the evacuation of staff.
6. When the Fire Control Coordinator cannot be on the project site, he shall designate a person who is on site to serve as the Fire Control Coordinator. The Fire Control Coordinator, or his designee, shall be on site at all times that work is being performed.

(d) *Costs.* All costs associated with the preparation and implementation of the Plan and compliance with all fire protection provisions and requirements will not be measured and paid for separately, but shall be included in the work.