



PW053105-17

# CITY OF RAPID CITY

## Engineering Division

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May 13, 2005

Rapid City Council

### **RE: Addendum #2 to the City of Rapid City Standard Specifications for Public Works Construction, 2004 Edition**

Honorable Mayor and Council:

The Public Works Department requests Council authorization to prepare an addendum to the City of Rapid City Standard Specifications for Public Works Construction, 2004 Edition. The proposed addendum will address the following items:

#### **Item 1. Fire Hydrants**

A request has been made by Dakota Supply Group and the American AVK Company to include the American AVK Model Fire Hydrant Series 27 in our Specifications for use in Rapid City. Utility Maintenance and Engineering Services have researched the AVK Series 27 fire hydrant specifications and performance and believe they meet or exceed the City's specifications for fire hydrants.

Currently, there are three fire hydrant manufacturers designated for use in the specifications. It is in the City's best interest to continue to limit the allowed fire hydrant manufacturer's to three. Utility Maintenance considered past performance, maintenance, and durability when evaluating the fire hydrants and we recommend adding the AVK Model Fire Hydrant Series 27 to the specifications. If the AVK fire hydrant line is added to the specifications we recommend deleting the American Darling fire hydrant from the specifications.



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**Item 2. Fire Hydrant Coating**

Engineering Services recommends adding coating requirements for fire hydrant barrels for corrosion prevention by requiring an external factory applied epoxy coating to the fire hydrant riser (barrel) sections and the adjoining 90 degree ells at the base of the risers. This modification would make the fire hydrants consistent with the epoxy coating specified for other fittings.

**Item 3. Dewatering**

There is a conflict in the specifications where one section allows and another section does not allow ground water to flow through completed sewers. DENR criteria does not allow groundwater to flow through completed sewers and for this reason, Engineering Services recommends changing the specification for dewatering to prohibit groundwater flow through completed sewers.

**Item 4. Silt Fence Details**

Per a request from Bierschbach Equipment & Supply, we recommend modifying the silt fence details to decrease the amount of woven wire backing and fabric material required for silt fence. This request is to decrease the woven wire from 32" to 26" wide and the fabric from 48" to 36" wide. The South Dakota Department of Transportation uses this silt fence configuration. Through our investigation the 24-26" high silt fence structure is adequate for silt retention, easier to install and maintain, less prone to failure due to damming and wind, easier to install with a machine, and less material is used. The cost of the proposed silt fence is also lower due to easier installation, fewer failures and less material used.

**Item 5. Materials Handling and Storage**

Engineering Services recommends adding a specification for repairing damaged or defective external epoxy or "Megabond" coatings supplied on steel or ductile iron pipe and fittings (including fire hydrant risers and joint restraint devices). This specification would detail a product or products and a process to repair damaged or defective coatings found upon delivery of the materials to the project site. The products recommended for use for these types of repair are: Protal 7125 Repair Cartridge as manufactured by DENSO North America Inc. or TC 7010 FS-Gray fast setting epoxy coating as manufactured by Tapecoat Co. Each product will be specified for use within a specific temperature range to ensure the most effective repair is accomplished.

**Item 6. Coating for Concrete Manholes and Lift Station Wet Wells**

Engineering Services recommends replacing the specified coating “Earthcoat 400P Pipe Coating” with “Kretekote 200”. The company which manufactured the “Earthcoat 400P Pipe Coating” has changed ownership and now manufactures the product under the “Kretekote 200” coating name. The Kretekote product meets our standards for coating concrete manholes and lift station wet wells.

**Item 7. Sanitary Sewer Materials – Ductile Iron Pipe**

The internal coating for ductile iron pipe used for sanitary sewer mains, services, and force mains currently specified is no longer available by the suppliers serving Rapid City. Engineering Services recommends changing the ductile iron pipe lining requirement for sewer pipe to a 40 mil ceramic Protectal 401 lining, or approved equal.

**Item 8. Traffic Control Device Details**

Engineering Services recommends removing details 90-1 and 90-1a (Guides for Traffic Control Devices Highway Construction Operations). The Manual of Uniform Traffic Control Devices (MUTCD) is the standard used for construction traffic control. The MUTCD will be referenced in the specifications. This will ensure the standards for traffic control.

Sincerely,

Dirk Jablonski  
Public Works Director

DJ/dcl