

**RESOLUTION NO.2007-02**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF NORTH KOOTENAI WATER DISTRICT, KOOTENAI COUNTY, IDAHO ADOPTING REVISED CONSTRUCTION STANDARDS; RESCINDING RESOLUTION NO. 2003-06; PROVIDING AN EFFECTIVE DATE OF THIS RESOLUTION; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATING THERETO**

**NORTH KOOTENAI COUNTY WATER DISTRICT  
Kootenai County, Idaho**

BE IT RESOLVED BY THE Board of Directors of North Kootenai Water District, of Kootenai County, Idaho (the "District") as follows:

WHEREAS, the District is a duly and properly formed water district under and by virtue of the constitution and laws of the State of Idaho; and

WHEREAS, the District is governed by an elected Board of Directors (the "Board"): and

WHEREAS, the Board has previously adopted standards for construction and installation of improvements to its water system as Resolution No. 2003-06; and

WHEREAS, the Board has determined that it is in the best interests of the District to develop and promulgate revised standards for construction and installation of improvements to the infrastructure of the District ("Construction Standards");

WHEREAS, the Board, District's staff and the District Engineer have had the opportunity to develop and review the revised Construction Standards and wish to approve and authorize the promulgation of the Construction Standards for the benefit of the residents of the District and the individuals and parties constructing improvements to the infrastructure of the District,

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of the District as follows:

**Section 1:    RESCISSION OF RESOLUTION NO. 2003-06**

The Board hereby rescinds Resolution No. 2003-06 in its entirety.

**Section 2: ADOPTION OF CONSTRUCTION STANDARDS**

The Board hereby adopts, approves and ratifies the Construction Standards as set forth in Exhibit "A" hereto incorporated here and fully by this reference.

The Board also decrees that these standards may be reviewed and changed from time to time in such modifications as may be approved by Resolution of the Board.

**Section 3: AVAILABILITY OF CONSTRUCTION STANDARDS**

The Construction Standards shall be reproduced and made available to the residents of the District and/or to other parties who may have involvement with or an interest in the acquisition and installation of improvements to the water system of the District.

**Section 4: OFFICERS AUTHORIZED**

The officers and staff of the District are hereby authorized and directed to take all action necessary or appropriate to affect the provisions of this Resolution.

**Section 5: RATIFICATION**


All action hereto and fore taken (not in consistent with the provisions of this Resolution) by the Board and the officers of the District directed toward the development and adoption of the Construction Standards, is hereby ratified, approved, and confirmed.

**Section 6: EFFECTIVE DATE**

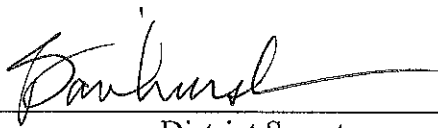
This Resolution shall be effective on and after its approval by the Board.

DATED this 1<sup>st</sup> day of February, 2007.

NORTH KOOTENAI COUNTY WATER DISTRICT,  
Kootenai County, Idaho

  
\_\_\_\_\_  
Chairman, Board of Directors.

ATTEST:

  
\_\_\_\_\_  
District Secretary

\*\*\*\*\*

I, the undersigned, Secretary of the Board of Directors of North Kootenai Water District, of Kootenai County, Idaho, hereby certify that the foregoing Resolution is a full, true, and correct copy of a Resolution duly adopted at a regular meeting of the District, duly and regularly held at the regular meeting place thereof on February 1, 2007, of which meeting all members of the Board had due notice and at which a majority thereof were present; and that at said meeting said Resolution was adopted by the following vote:

AYES, and in favor thereof, Directors:

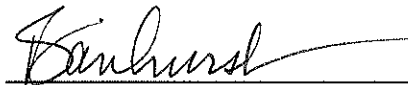
NAYS, Directors:

ABSENT, Directors:

ABSTAIN, Directors:

I further certify that I have carefully compared the same with the original Resolution on file and of record in my office; that said Resolution is a full, true, and correct copy of the original Resolution adopted at said meeting; and that said Resolution has not been amended, modified, or rescinded since the date of its adoption, and is now in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the official seal of the District on February 1, 2007.



District Secretary

(SEAL)

# STANDARD WATER SPECIFICATIONS

North Kootenai Water District  
P.O. Box 2290  
1841 W. Hayden Avenue  
Hayden ID 83835

**Board of Directors:**

Linda Davis, Chairman  
Richard Fairhurst, Secretary  
Jack Berger  
Tom Crimmins  
Maimie Moore

**District Manager:**

Mike Galante

**District Engineer:**

Welch Comer & Assoc., Inc.  
1626 Lincoln Way  
Coeur d'Alene ID 83814

**District Counsel:**

Mike Ormsby  
K&L/Gates  
1200 Ironwood Drive, Suite 315  
Coeur d'Alene ID 83814

These specifications approved and adopted by North Kootenai Water District,

Resolution # 2007-02 on 2/1/07, 2007.

North Kootenai Water District

Resolution # 2007-02

A Resolution Establishing Standards For The Construction Of Improvements To The Water System.

BE IT RESOLVED by the Board of Directors of the North Kootenai Water District, that;

This Resolution shall be known, and shall be cited, as the Standard Water Specifications Resolution, and, be it further RESOLVED, that;

North Kootenai Water District, Idaho, hereby adopts the "IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION, 2002 EDITION" latest revision, as the standard specifications to cover the general methods of constructing water system improvements, extensions, replacements and associated water works facilities.

Each specific project is intended to be supported by supplementary drawings and specifications of special conditions, which may include, but is not limited to, the following:

- a. method of measurement and payment
- b. special conditions
- c. special structures, such as tanks and reservoirs, pumping plants, regulators, fire services, large water services, etc.
- d. encroachment permits from Hayden, Hayden Lake, Kootenai County, Lakes or Post Falls Highway District, State of Idaho, Burlington Northern Santa Fe and/or Pacific Gas & Electric where each has jurisdiction
- e. special crossings of streams, bridges, and railroads
- f. special concerns at easements
- g. easements or rights-of-way to be acquired

The adoption of the "IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION" shall include the following deletions, additions, and revisions:

**DEFINITIONS:**

"District" shall mean the North Kootenai Water District, 1841 W. Hayden Avenue, P.O. Box 2290, Hayden, Idaho 83835.

"District Manager" shall mean the General Manager of the North Kootenai Water District, acting personally or through assistants acting within the scope of the particular duties entrusted to them.

**GENERAL:**

1. Compaction test results, when available, shall be immediately forwarded to the District Manager.
2. Bacteriological tests shall be taken from new water mains by the contractor at times and places approved by and in the presence of the District Manager or his/her representative and the results, when available, shall be immediately forwarded to the District.
3. All work performed on public water system improvements shall be done by firms or individuals who possess a valid IDAHO PUBLIC WORKS CONTRACTORS LICENSE as required by Title 54, Chapter 19, Idaho Code as amended, "The Public Works Contractors License Act", or, by District employees.

4. Plans and specifications for water system improvements that will be owned or maintained by the District shall be stamped by a Professional Engineer licensed by the State of Idaho and reviewed and approved by the District Manager and the District Engineer. If required, the plans and specs shall also be reviewed and approved by the DEQ and/or Panhandle Health District.
5. Before a project will be accepted as completed, the Developer/Project Engineer shall provide to the District a "Project Completion Checklist" with each item on the checklist completed to the sole satisfaction of the District.
6. Paragraph 5.04/B/1 of Division 100-General Conditions shall include the following:

The contractor shall not begin work in any public right-of-way or easement until he/she has obtained all the insurance as required below and satisfactory proof of such insurance has been submitted to and approved by the District Manager. Such insurance shall contain a provision preventing cancellation without ten (10) days prior written notice to the District. The District, its officers, agents and employees shall be named as additional insured on all insurance policies. The Contractor shall not allow any sub-contractor to begin work on its sub-contract until the insurance required of the sub-contractor has been obtained. Certificates evidencing the issuance of the following insurance shall be filed with the District before work begins.

| <u>TYPE OF COVERAGE</u>  | <u>LIMITS OF LIABILITY</u>   |
|--|--|
| Workers Compensation and Employers Liability   | Statutory  |
| Comprehensive general liability which shall include, or be endorsed to include, the following:   | Bodily Injury \$1,000,000 each accident;   |
| a) Cross Liability Coverage  |  |
| b) Blanket Contractual Liability   | Property Damage  |
| c) Contractor's Protective Liability   | \$500,000 each occurrence  |
| d) Products and Completed Operations   | \$1,000,000 aggregate  |
| e) Broad form Property Damage  |  |
| f) XCU Property Damage Liability   |  |
| g) Automobile Liability Insurance covering all automobiles, trucks, tractors, trailers, or other automotive equipment whether owned or rented by the Contractor, or employees of the Contractor. | Bodily Injury<br>\$1,000,000 each accident<br><br>Property Damage<br>\$500,000 each accident |

The Contractor shall pay the premiums thereon and maintain such insurance in effect until the completion of the work. The contractor shall agree to indemnify, hold harmless and defend the District from and against any and all liability for loss, damage or expense which the District may suffer or for which the District may be held liable by reason of injury (including death) to any person or damage to any property arising out of or in any manner connected with the work under this contract whether or not due in whole or in part to any act, omission, or negligence of the District or any of its representatives or employees together with any and all attorney's fees incurred by owner on account thereof.

7. Work shall not begin until the Contractor's proof of insurance has been approved by the District Manager.
8. Forty-eight (48) hour advance notice shall be given to North Kootenai Water District (772-3619) before construction on the water system improvements begin and before any required shut downs of the operating water system. Hours for any scheduled shut downs will be no earlier than 9:00 AM and return to normal operations by not later than 5:00 PM. Any other exceptions to these times must be authorized by the District Manager.

9. Operation of valves or other components of the existing water system shall be done only by District personnel.
10. Hours of work shall be between 7:00 a.m. and 5:00 p.m. Monday through Friday, excepting District defined holidays. Work at other times may be allowed only with prior written approval by the District Manager.
11. Location and elevation of existing water facilities shall be confirmed by field measurements and excavation exploration by the contractor prior to beginning of new work.
12. All water mains, valves, fire hydrants, services, and appurtenances shall be installed, tested, and approved prior to paving.
13. Record drawings depicting actual construction must be submitted to the District Manager within 30 days of completion of construction. Any deviation from the approved construction plans shall be noted on the record drawings.
14. Add drawing SD-409, water service.
15. Add drawing SD-410, fire hydrant.

#### WATER SYSTEM NOTES:

1. Water:

All work shall conform to or exceed the pertinent sections of the Idaho Standards for Public Works Construction, Current Edition.

2. Water Pipe:

Water main pipe shall be [insert material] class [insert pressure rating] or greater, sized as shown on the plans. All water pipe shall be placed with minimum cover of 48".

Minimum nominal pipe diameter for water mains shall be eight inches (8") unless otherwise approved by the District manager. Minimum pressure class shall be 150 psi.

12 gauge locating wire taped to the pipe every five feet (5') shall be required on all non-metallic buried water mains and water services that are not installed 90° to the water main or service.

Install vinyl tape marked "water below" three feet (3') directly above all buried water pipes.

3. Fittings:

Fittings shall be ductile iron. All fittings shall be restrained, including the appropriate restrained length of pipe.

Polyvinyl chloride (PVC) fittings are not allowed

4. Trench Excavation and Backfill:

Trench excavation and backfill shall conform to Section 300 of the ISPWC. Trench backfill shall be type B-1. The Contractor shall haul away and dispose of any material that is unfit for type B-1 backfill at an approved waste site. Disposal of excess and unfit backfill shall be considered incidental to payment for excavation and backfill.

Minimum cover over pipes shall be forty-eight inches (48").

5. Bedding:

PVC:

Type I bedding shall as specified in Section 300 of the ISPWC. Pipe shall be bedded, providing a 6" cover over the top of the pipe.

D.I.:

Type II bedding as specified in Section 300 of the ISPWC.

6. Compaction of Backfill:

In Street:

Backfill Type A-1, the Contractor shall use mechanical compaction for backfill. Backfill shall be compacted to 95% of maximum density as established by a standard proctor. The Contractor shall guarantee the backfill free from any settlement for one (1) year following the final acceptance of the work by the District. Any damages from settlement shall be immediately repaired by the Contractor at his expense. No additional payment shall be made for this item.

Cross Country:

Backfill Type A-3, with the exception that native shall be used, is as specified in the ISPWC, Section 300, shall be compacted to 90%.

7. Valves and Hydrants:

Valves shall be AWWA approved resilient seat gate valves. All valves shall be equipped with an adjustable cast iron valve box, two-piece, slip type, for a 5' wrench, marked "water".

Fire hydrants and resilient seat gate valves shall be Waterous, Mueller or pre-approved equal.

The 4.5 inch steamer port on all new fire hydrants shall be equipped with a Storz fitting.

One spring loaded, bolt-on six-foot tall fire hydrant marker, as manufactured by Hydra-Shield Mfg., Irving, TX, or approved equal, shall be installed on the base of each fire hydrant.

Fire hydrant lines shall be 6" PVC C-900 and shall have fitting restraints such as mega-lugs or grip ring type fittings.

Thrust blocks: All fire hydrants and hydrant tees shall have poured in place thrust blocks as specified in the ISPWC. Thrust blocking or mechanical thrust restraints shall be provided at each horizontal or vertical change in piping. Engineer shall provide sizing chart based on working pressure and soil condition.

8. Services:

Water service pipe must be Pressure Class 200, DR7 Iron Pipe Size Polyethylene (PE) Pressure Pipe for Water Service per AWWA C-901 with Standard Code Designation PE 3406 per ASTM D 3350. Minimum size shall be 1". Service shall have a radio read water meter as approved by the District.

9. Water and Sewer Line Crossings:

At least 18" vertical separation should be maintained between the water and sewer lines. If the water line is below the sewer line, the sewer shall be supported to prevent deflection of the pipe or breakage of the water line. If the 18" vertical separation between the bottom of the water line and the top of the sewer line cannot be maintained, the sewer lines shall be



HYDRANTLOK MB-22529  
(SEE WWW.USABLUEBOOK.COM)

WATEROUS SERIES 90, MUELLER  
CENTURION 200 OR M&H SERIES 929  
FIRE HYDRANT WITH STORZ CONNECTOR  
ON LARGE PORT. PAINT FIRE HYDRANT  
IN ACCORDANCE WITH LOCAL  
STANDARDS

6' SPRING FIRE  
HYDRANT FLAG

VALVE BOX SET 1/4"  
BELOW FINISHED GRADE

CURB

3' MIN.

EXTEND TRACER  
WIRE 18" ABOVE  
FINISHED GRADE

$\frac{1}{2}$ "  
 $\frac{1}{4}$ "  
 $\frac{1}{2}$ "  
p/10

NO. 12 COPPER TRACER WIRE  
TAPED TO TOP OF PIPE. SEE  
SD409 FOR SPLICE  
REQUIREMENTS

RESTRAINED  
MECHANICAL JOINT  
(TYPICAL)

6" PVC CLASS 150 C-900

6" FLG x MJ  
GATE VALVE

POUR CONCRETE PAD  
15" x 15" x 4" DEEP  
UNDER HEEL OF HYDRANT

THRUST BLOCK

KEEP FIRE HYDRANT  
DRAINS CLEAR

MIN. OF 1/4 C.Y. OF 2"  
DRAINROCK PLACED TO 18"  
UNDER LOWEST PART OF  
HYDRANT AND UP TO 6"  
ABOVE ANY WEEP HOLES  
OR DRAIN OPENINGS

THRUST  
BLOCK

MJ x FLG x MJ  
TEE

MJ x MJ x FLG

NOTES:

1. FIRE HYDRANT LOCATION TO BE SET IN ACCORDANCE  
WITH LOCAL STANDARDS OR AS DESIGNATED BY THE  
ENGINEER.

2. THRUST BLOCKS TO BE CAST AGAINST UNDISTURBED SOIL.

**NORTH KOOTENAI WATER DISTRICT  
STANDARD FIRE HYDRANT DETAIL**

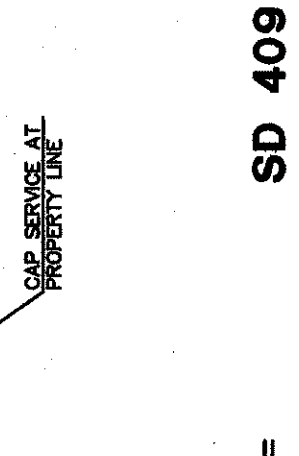
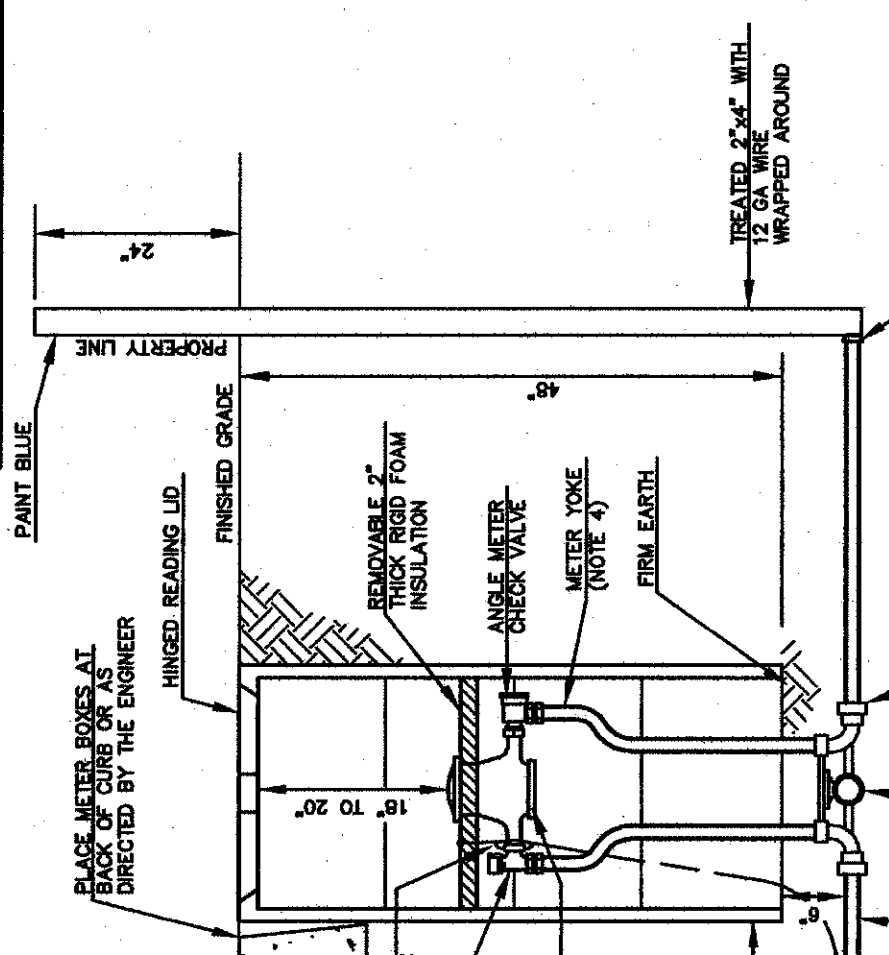
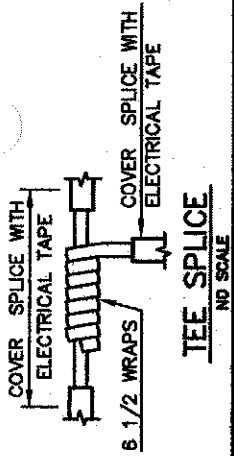
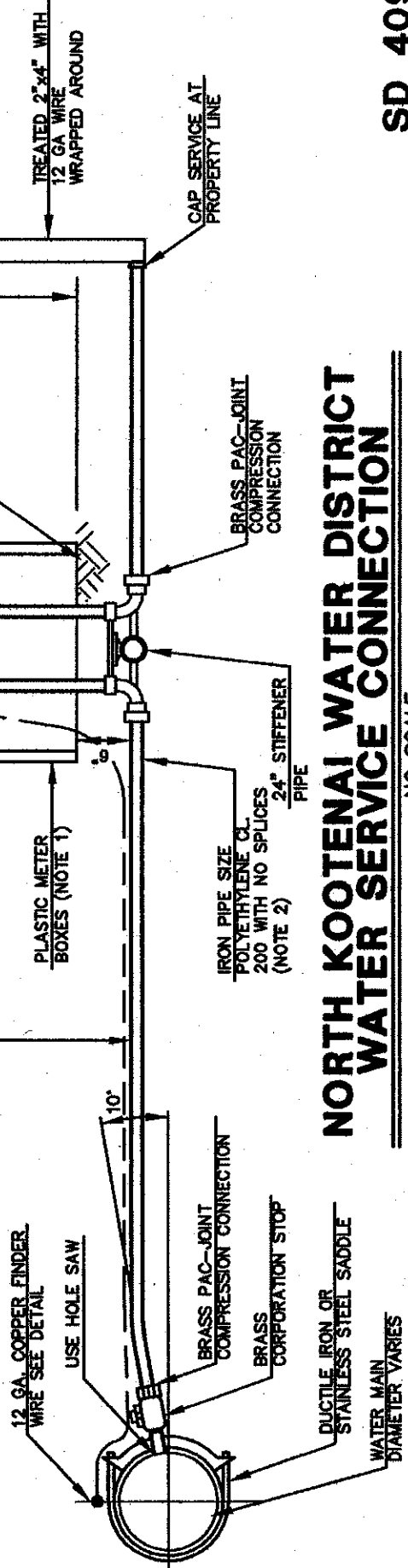
1  
D1

NO SCALE

# NOTES

1. 1" SERVICE - RAVEN 13"x 24" OR APPROVED EQUAL  
1-1/2" AND 2" SERVICES - RAVEN 17"x 30" OR APPROVED EQUAL
2. SIZE PIPE AND FITTINGS TO MATCH SERVICE SIZE - 1" , 1-1/2",  
OR 2".
3. CONTRACTOR INSTALLED SERVICES SHALL SUBSTITUTE FORD IDLER  
(FORD CATALOG NUMBER 4, 6 OR 7 FOR METER DEPENDING ON  
SERVICE SIZE). METER SHALL BE MASTER METER RADIO READ  
METER, NKWD RADIO FREQUENCY NO. 41.
4. METER YOKE MAY BE REPLACED WITH TYPE M COPPER AND  
SOLDER FITTINGS IF ASSEMBLED BY A LICENSED PLUMBER OR BY  
A PERSON PRE-APPROVED BY NKWD.
5. GALVANIZED STEEL PIPE AND FITTINGS ARE NOT ALLOWED.

\* INSTALL FINDER WIRE IF  
SERVICE LINE IS NOT  
90° TO MAIN



# NORTH KOOTENAI WATER DISTRICT WATER SERVICE CONNECTION

NO SCALE