



RECEIVED

DEC 23 2015

AWWU
ENGINEERING

December 21, 2015

Mr. James Armstrong, P.E.
Anchorage Water & Wastewater Utility
3000 Arctic Blvd.
Anchorage, AK 99503

File: Denali St., NLB-Fireweed Water Rehab.

PWSID:210906 - AWWU

Re: Denali St., Northern Lights Boulevard-Fireweed Water Rehabilitation Project
Final Approval to Operate/ Separation Distance Waiver

Dear Mr. Armstrong:

On December 18, 2015, this office received record drawings, pressure and coliform test results, and a request for Final Approval to Operate the modifications made to the Anchorage Water and Wastewater Utility (AWWU) distribution system constructed as part of the Denali Street, Northern Light Boulevard –Fireweed Water Rehabilitation Project. The system was previously issued a letter granting Construction Approval on March 10, 2015, and later a Construction Change Order and Separation Distance Waiver Approval on May 21, 2015. **This letter issues Final Approval to Operate for the modifications and an updated Separation Distance Waiver Determination for the modifications as shown in the record drawings and outlined below.**

Project Description

This project removed the existing 6” cast iron pipe (CIP) water main and replace it with approximately 995 linear feet of 8”, class-52, zinc coated, ductile iron pipe (DIP) along Denali Street from Northern Lights Boulevard to Fireweed Lane. Also included in the project were: the installation of two single pumper fire hydrant assemblies and valves; cathodic protection; re-establishment of service connections; and other related appurtenances. At several locations the Constructed water main encroaches on established minimum separation distance requirements for drinking water mains and potential sources of contamination as per 18 AAC 80. Table 1 summarizes the separation distance encroachments for this project.

Table 1: Separation Distance Encroachments

Water line Sta.	Water Line	Potential Contaminant	Encroachment Type	Separation (≈feet)		Position Relative to Water Main	Status of Waiver
				Vert.	Horz.		
5+81, 29' R to 5+81, 6' L	8" DIP : (P)	12" CPP-SD lead : (RR)	Crossing	>1.5	-	CPP-SD above	None required, serves a single SD lead
5+81, 6' L	" : "	SDCB : (RR)	W/in 10'	5.5	6.0	SDCB above	Approved
5+81, 6' L to 6+80, 10' R	" : "	12" CPP-SD : (RR)	W/in 10' & Crossing	5.5	-	CPP-SD above	Approved
7+01	" : "	18" CPP-SD : (RR)	Crossing	>3	-	CPP-SD above	Approved
7+08 to 7+40	" : "	12" CPP-SD lead : (RR)	W/in 10' & Crossing	3.0	-	CPP-SD above	None required, serves a single SD lead
7+40, 6' L	" : "	SDCB lead: (RR)	W/in 10'	5	5	SDCB above	None required, SD lead

8+75	“ : “	8” AC-SS : (E)	Crossing	1.5	-	AC-SS above	Approved - See Sanitary Sewer Special Provisions
10+03, 28’ R to 10+09, 9’ L	“ : “	12” CPPP-SD lead : (RR)	Crossing	>1.5	-	CPP-SD above	None required, serves a single SD lead
10-09, 9’ L	“ : “	SDCB : (RR)	W/in 10’	3.0	8.5	SDCB above	Approved
10+09, 9’ L to 10+73, 7’ R	“ : “	12” CPP-SD : (RR)	W/in 10’ & Crossing	4.0	-	CPP-SD above	Approved
10+73, 7’ R	“ : “	SDCBMH : (E)	W/in 10’	1.5	7.0	SDCBMH above	Approved
10+74	“ : “	18” CPP-SD : (E)	Crossing	3.0	-	CPP-SD above	Approved
10+73, 7’ R to 10+96, 9R	“ : “	12” CPP-SD : (RR)	W/in 10’	>4	8	CPP-SD above	None required, serves a single SD lead
10+96, 9R	“ : “	SDCB : (RR)	W/in 10’	>4	8	SDCB above	None required, SD lead
Abbreviations	AC-SS - Asbestos concrete sanitary sewer, CPP – Corrugated Polypropylene, E – Existing, RR - Remove & replace, SD - Storm drain, SDCB[MH] – Storm drain catchbasin [manhole], P - Proposed, P[CMP] – Precoated [corrugated metal pipe], W/in - Within						

Basis for Waiver Approvals

The following items were taken into consideration in reviewing this waiver request:

1. The water main was installed and pressure tested in accordance with Municipality of Anchorage Standard Specification 60.02;
2. The design maximized horizontal and vertical separation distances as grade, configuration, existing utilities, and typical construction practices allow;
3. Storm sewers built as part of this project were constructed of SaniTite HP Sanitary Sewer Corrugated Polyethylene Pipe which can be pressure tested to ensure watertightness.
4. The SD crossings at Sta. 5+81, 6’ L to 6+80, 10’ R and 10+09, 9’ L to 10+73, 7’ R were pressure tested to ensure watertightness; and
5. The remaining storm drain crossings listed above were not be pressure tested on this project due to site specific and project specific conditions, but were built with construction oversight and inspection of the workmanship.

Sanitary Sewer waiver special provision

The existing asbestos concrete sanitary sewer can’t be pressure tested or double encased at this point in time. The sanitary sewer has been identified on the master plan for replacement in the future, and when the sewer line is repaired or replaced the waiver for the asbestos concrete sewer line crossing is void and the sanitary sewer must meet the all crossing requirements of 18 AAC 80.020(f) including but not limited to, being constructed in a manner equivalent to the requirements for a potable water pipe and either pressure tested to ensure watertightness or enclosed in a carrier pipe of similar strength and rating as the actual pipe. The waterline must be constructed to maximize the distance between the waterline joints and the sanitary sewer.

Based on an evaluation of the available information and in accordance with the State’s Drinking Water Regulations, 18 AAC 80, the separation distance waiver requests have been approved as detailed in Table 1.

Final Approval to Operate

The submitted engineering plans, limited to the scope of the review described above, have been reviewed and are approved in accordance with the Drinking Water Regulations (18 AAC 80). The enclosed Construction and Operation Certificate, with the Approval to Operate section completed, constitutes the written approval required under the Drinking Water Regulations.

Approval Limitations

This approval does not imply the granting of additional authorizations, nor obligate any federal, state or local regulatory body to grant required authorizations. This is not an approval of omissions or oversights by this office or noncompliance with any applicable regulation. The Department’s

approval to operate does not guarantee correctness of the functional design or waive the owner's responsibility for continued compliance with State regulations.

Appeal Process

Any person who disagrees with this decision may request by mail, e-mail, or facsimile an informal review in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195-15.340. Informal review requests must be delivered to the Division Director within 15 days of receipt of this decision. Adjudicatory hearing requests must be delivered to Commissioner Larry Hartig within 30 days of this decision, otherwise, the right to appeal is waived. For more information, visit www.dec.state.ak.us/commish/ReviewGuidance.htm.

If you have any questions regarding this plan review please do not hesitate to contact me.

Sincerely,



Roy Robertson, PE
Engineer II

Encl.: Construction and Operations Certificate for Public Water Systems

Cc w/Encl.: Wendy Drew



State of Alaska Department of Environmental Conservation
Drinking Water Program



PUBLIC WATER SYSTEM
CONSTRUCTION AND OPERATION CERTIFICATE

Approvals listed below are for compliance with the requirements of the State of Alaska Drinking Water Regulations 18 AAC 80. Any approvals granted do not imply or grant any other federal, state or local authorizations that may be required.

Water System Name: AWWU PWSID: 210906

Water Source: Mixed Surface Water & Ground Water Classification: Community

System Wide Approval Modification Approval

Project Description: Denali Street, Northern Lights Boulevard-Fireweed Water Rehabilitation Project

A. APPROVAL TO CONSTRUCT

Plans submitted in accordance with 18 AAC 80.205 by James Armstrong, P.E. have been received and are

approved as submitted conditionally approved, see attached letter

Roy Robertson (Reviewing Engineer) Engineer II, DEC (Title) 3/10/2015 (Date of Approval)

If applicant fails to construct, alter, install, or modify the system within two years of the date of approval to construct, approval is void, and plans must be resubmitted for Department review and approval (as per 18 AAC 80.215 (a)).

Approved Change Order

Change (contract order number or description): change CMP to Sanitize and waiver review

Roy Robertson (Reviewing Engineer) Engr. II (Title) 5/21/15 (Date of Approval)

B. APPROVAL TO OPERATE

This section must be completed and signed by the Department before any water is made available for public use.

Interim Approval to Operate:

This interim approval to operate expires on _____. It is illegal to operate a public water system beyond the expiration date without **Final Approval to Operate** from the Department.

(Reviewing Engineer) (Title) (Date of Approval)

Interim Approval Extension:

This interim approval to operate has been extended to _____.

(Reviewing Engineer) (Title) (Date of Approval)

Interim Approval Extension:

This interim approval to operate has been extended to _____.

(Reviewing Engineer) (Title) (Date of Approval)

Final Approval to Operate

Record drawings and other documents submitted to the Department, or an inspection by the Department, has confirmed that the public water system was constructed in substantial conformance to 18 AAC 80.

F.W. Brannan (Reviewing Engineer) Engr II, DEC (Title) 12/21/15 (Date of Approval)