Staff Report

for the Board of Directors' Meeting of April 26, 2017

TO: Board of Directors

FROM: Chip Close, Water Operations Manager

DATE: April 14, 2017

SUBJECT: Blair Court Waterline Extension & Canal Encasement

Request for Variance to Regulation 8.05.03 – Consent Agenda

_____OPERATIONS

RECOMMENDATION:

Approve the request from Nevada City Engineering, Inc. on behalf of the Developer of the Blair Court Waterline Extension and Canal Encasement project to allow a variance of five (5) contiguous parcels to be served by one (1) private fire service.

BACKGROUND:

Improvement plans have been submitted for the Blair Court Waterline Extension and Canal Encasement project and a plan check and inspection deposit has been collected. The plans are in process of being reviewed by departmental staff. The District has provided Nevada City Engineering with a standard fire flow letter as to the flows available at this location using distribution system modeling.

Doug Roderick is the Project Engineer and has reviewed the suggested private fire service variance of providing fire flow to five parcels. The existing Water Service Regulation 8.05.03 – Service to More Than One Parcel – clearly states that up to four (4) contiguous parcels may be served by one (1) private fire service. Staff has no objection to allowing the variance as requested since the private fire service sizing/demand is determined by Nevada City Engineering. It is their responsibility to determine that the private fire service has the ability to meet the demand requirements of the 5 parcels and to design the fire protection system accordingly.

On April 11, 2017, the Water & Hydroelectric Operations Committee reviewed the request and expressed concerns regarding the District's responsibility of providing

adequate fire protection to five buildings as proposed. It was clarified that the District provides the developer fire flow information that can be delivered from the distribution system and it is their responsibility to design the fire protection system accordingly to meet requirements put in place by the appropriate fire agency.

The committee unanimously agreed to recommend the Board of Directors approve the request for variance as stated above via consent agenda.

BUDGETARY IMPACT:

None. All design and construction costs are borne by the Developer.

CC/sw

Attachments (4):

- Request Letter from Nevada City Engineering
- Except from NID Water Service Rules & Regulations Section 8.05.03
- Location Map showing approximate Private Fire Service Location
- Fire Flow Letter dated April 5, 2017

NEVADA CITY ENGINEERING, INC.

505 COYOTE STREET, SUITE B • P.O. BOX 1437 NEVADA CITY, CALIFORNIA 95959 • TELEPHONE (530) 265-6911 • FAX (530) 265-8058

Engineering • Surveying • Planning

March 28, 2017

Nevada Irrigation District 1036 West Main Street Grass Valley, CA 95945

Attn: Shannon Wood

Re: <u>Private Fire Service</u> Blair Industrial Park

Dear Shannon,

This letter is written as a follow up to our conversation regarding the above referenced project. As we discussed, this site is being developed as 5 individual, industrial parcels. Each new parcel will be developed with individual buildings and the potential for individual ownership.

As this site is confined without the potential for expansion by topography and zoning, we are proposing to serve these 5 lots with a single private fire service assembly. This seems the practical solution although we recognize this is beyond the district standard of 4 lots served and will require a variance, waiver or exception to said standard.

Please advise on how to proceed with this request or confirm that this correspondence is sufficient to get the ball rolling. If there is formal application paperwork, or if you have any questions or require anything further, please feel free to contact me.

As always, thank you for your assistance.

Respectfully submitted,

Bill Green

Private Fire Service Letter Agreement, example of which is shown in Form 8-D. This method governs plans, specifications, construction, inspection, and other requirements for the Applicant and his contractor. These letter agreements and conveyance of the completed fire service are subject to approval by the General Manager.

eff. 12/12/90; rev. 12/08/04

8.05.03 Service to More Than One Parcel

As long as all the parcels involved are properly fronted by a water main, as required under Section 10.01.02 of these Regulations, and upon the written application of all landowners, up to four contiguous parcels may be served by one private fire service.

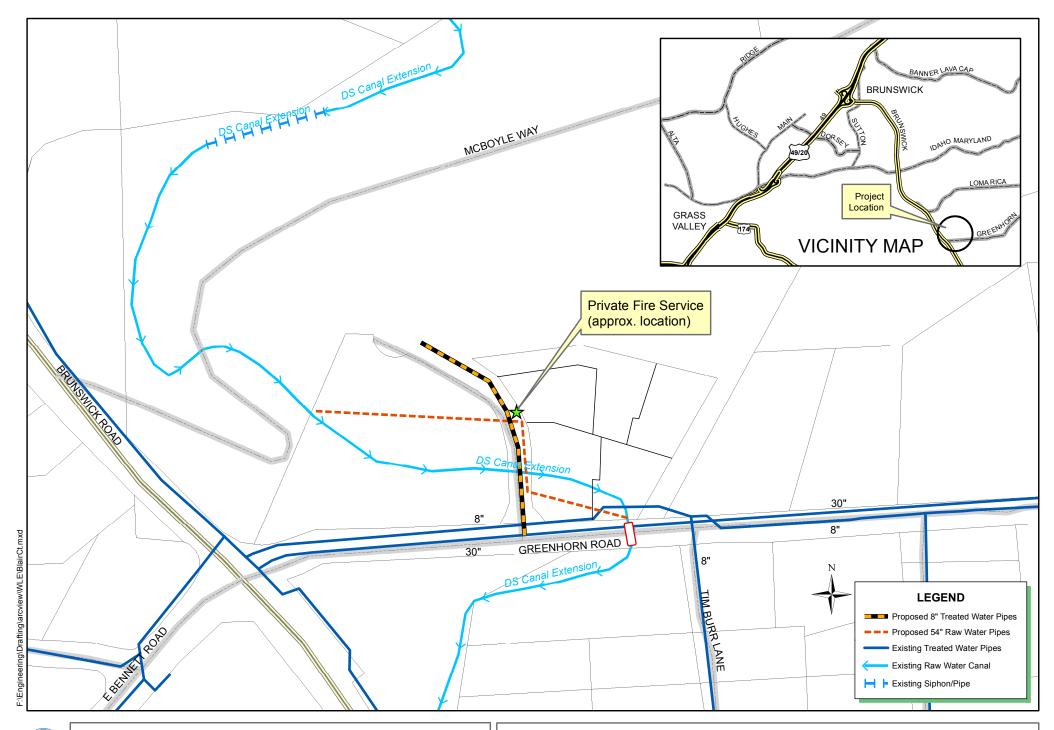
Property owner(s) of each parcel being served by a Private fire service must have a valid application on file with the District indicating their responsibility for paying all charges and penalties, along with their responsibility for maintaining the system beyond the private fire service.

In certain instances the District, at its sole discretion, may permit or require a single parcel to have more than one private fire service connection. Examples include a shopping center/business center with varied tenant water requirements or two commercial buildings located on one parcel.

rev. 12/08/04, rev. 03/10/10

8.05.04 Charges for Water Service

No charge will be made for water used for extinguishing fires, but any water lost through leakage or for testing purposes or used in violation of these Regulations shall be paid for by the applicant at double the normal water consumption charges. If unauthorized water use or leakage continues for more than two billing periods after notification of the water use, the service may be discontinued.





NEVADA IRRIGATION DISTRICT

NEVADA COUNTY -- PLACER COUNTY GRASS VALLEY, CALIFORNIA

BLAIR COURT WLE AND CANAL ENCASEMENT

Drawn By: D. HUNT

Date: 4/13/2017

Scale: 1" = 200' @ 8-1/2x11

Sheet: 1 of 1



NEVADA IRRIGATION DISTRICT

1036 W. Main Street, Grass Valley, CA 95945-5424 ~ www.nidwater.com (530) 273-6185 ~ Fax: (530) 477-2646 ~ Toll Free: (800) 222-4102

April 5, 2017

<u>Contact:</u> Bill Green <u>Email:</u> bill@nevadacityengineering.com

Phone: Fax:

Address: Nevada City Engineering

From: Nevada Irrigation District, Tonia M. Tabucchi Herrera, Associate Engineer

RE: Estimate Fire Flow for Blair Crt WLE (EWO#2108), Grass Valley, APN#06-391-35

<u>System:</u> Loma Rica <u>Flow:</u> 1500 gpm

Static: 123 psi Residual: 92 psi

<u>Ground Elevation:</u> 2894 ft (estimated, revise if actual elevation differs)

<u>Comments</u>: Analysis is based the installation of the 8" waterline as proposed in

March 2017 improvement plans and was conducted at the end of the

waterline (highest point on the public waterline).

Pressure is at the water main. It has not been adjusted for friction loss in the fire service, the hydrant, or the lateral pipe to the fire service or hydrant. The California Health and Safety Code requires that the water system be designed to maintain an operating pressure, under fire flow conditions, of not less than 20 psi at all service connections. Although the pressure may be greater than 20 psi at the site, this is the maximum fire flow that can be delivered to the site while maintaining 20 psi residual at all service connections in the water system.

Fire flow and pressures were estimated by computer simulation. If field verification is desired, you may conduct a field test; however, this test must be scheduled with NID prior to the test. The test must be approved and coordinated with NID operations.

NID disclaims liability arising out of or relating to fire service improvements or operations. NID neither guarantees fire protection, nor is it responsible for fire losses. NID fire services are governed by NID Water Service Regulations. According to section 8.02, this reads as follows:

The District does not guarantee or represent that a specific or certain minimum water pressure or volume of water will be available through a fire service. Fire services will be subject to the variations of water pressure and flow and to the temporary shutdowns required in the operation and maintenance of the system or any interruptions of operations in the system. The District shall be held in no way responsible for and the applicant and/or local fire-fighting entity must agree to hold the District free and harmless from injury or damage caused by the lack of water or pressure available to a fire service.

If you have questions or comments, please call me at 530-273-6185 ext. 215 or email me at herrera@nidwater.com.