# CITY COUNCIL MEETING AGENDA
Tuesday – June 24, 2025 – 6:00 PM


Shawn O'Neill,
*Mayor*
soneill@cityofnapavine.com

Brian Watson,
*Council Position No.1*
bwatson@cityofnapavine.com

Ivan Wiediger,
*Council Position No.2*
iwiediger@cityofnapavine.com

*Don Webster,*
*Council Position No.3*
dwebster@cityofnapavine.com

Heather Stewart,
*Council Position No.4*
hstewart@cityofnapavine.com

Duane Crouse,
*Council Position No.5*
dcrouse@cityofnapavine.com

**Staff Members**
Rachelle Denham,
City Clerk

Michelle Whitten,
City Treasurer

Bryan Morris,
PW Director
Community Development

John Brockmueller,
Chief of Police

Allen Unzelman
Honorable Judge-Municipal Court

Jim Buzzard,
Legal Counsel

**City of Napavine**
407 Birch Ave SW
P O Box 810
Napavine, WA 98565
360-262-3547

**City Website**
www.cityofnapavine.com


**I. CALL TO ORDER**
**II. INVOCATION**
**III. PLEDGE OF ALLEGIANCE**
**IV. ROLL CALL**
**V. APPROVAL OF AGENDA – AS PRESENTED**

**VI. APPROVAL OF MEETING MINUTES – June 10, 2025**

1) **Regular Council Meeting**

**VII. STAFF & COUNCIL REPORT**

**VIII. CITIZEN COMMENTS – NON-AGENDA ITEMS**

**IX. NEW BUSINESS**

1) **Vouchers – M. Whitten**
2) **Tiger Meadows Project Recommendation from Planning Commission – B. Morris**
3) **Jefferson Station Improvements Engineering Contract Statement of Work – B. Morris**

**X. ADJOURNMENT – CLOSE OF MEETING**

**Council Meeting is held in person and via Teleconference.**

**Teleconference Information**

**Dial-in number (US): (720) 740-9753**

**Access code: 8460198**

**To join the online meeting: https://join.freeconferencecall.com/rdenham8**

NAPAVINE CITY COUNCIL REGULAR MEETING MINUTES
June 10, 2025, 6:00 P.M.
Napavine City Hall, 407 Birch Ave SW, Napavine, WA

**CALL TO ORDER:**

Mayor Shawn O'Neill called the regular city council meeting to order at 6:00pm.

**INVOCATION:**

The invocation was led by Bryan Morris.

**PLEDGE OF ALLEGIANCE:**

Mayor Shawn O'Neill led the flag salute.

**ROLL CALL:**

**Council members present**: Shawn O'Neill Mayor, Brian Watson Councilor #1, Ivan Wiediger Councilor #2, Donald Webster Councilor #3, and Heather Stewart Councilor #4.

**City staff members present**: City Clerk - Rachelle Denham, Chief of Police – John Brockmueller, CD/PW Director - Bryan Morris. Not Present: Treasurer - Michelle Whitten and Legal Counsel – Jim Buzzard.

| | | |
|---|---|---|
| **MOVED:** | Don Webster | Motion: Excuse Duane Crouse. |
| **SECONDED:** | Ivan Wiediger | |
| *Discussion: No Discussion* | | |
| **VOTE ON MAIN MOTION:** | 4-0 Motion Carried: 4 aye and 0 nay. | |

**CONSENT/APPROVAL OF AGENDA**

| | | |
|---|---|---|
| **MOVED:** | Ivan Wiediger | Motion: Approval of Agenda- As Presented. |
| **SECONDED:** | Heather Stewart | |
| *Discussion: No Discussion* | | |
| **VOTE ON MAIN MOTION:** | 4-0 Motion Carried: 4 aye and 0 nay. | |

**APPROVAL OF MEETING MINUTES**

| | | |
|---|---|---|
| **MOVED:** | Brian Watson | Motion: Approval of the regular council meeting minutes for May 27, 2025. |
| **SECONDED:** | Don Webster | |
| *Discussion: No Discussion.* | | |
| **VOTE ON MAIN MOTION:** | 4-0 Motion Carried: 4 aye and 0 nay. | |

**STAFF & COUNCIL REPORTS:**

**John Brockmueller – Chief of Police**

- Greetings to the council & operations as normal. Stats sheets will be presented at the next meeting. Participated in the Torch Run, great event.

**Bryan Morris - PW/CD Director**

- The report is in writing & operations as normal.

**Rachelle Denham – City Clerk**

- The report is in writing.

**Shawn O'Neill – Mayor**

- Honored that the city is part of the Torch Run. He plans to run in the torch run next year.

**Sandra White – LCFD5**

- The report is in writing. The topics discussed include Apparatus Bay, Station 52, and Fire District Fire Dog Mascot, named Blaze, Brush Truck has been dispatched, Added new personnel, and has added a new low water alarm. This alarm will sound anytime the city reservoir level drops to a point as predetermined by the Napavine Water Dept.

**Deborah Graham – Planning Commissioner**

- There was a Public Hearing meeting held on June 2nd to discuss the Tiger Meadows Development, first phase on Woodard Rd. The Planning Commission moved to approve the project and will be passed on to the council. After the meeting and during the meeting there were verbal threats by members of the audience. The mayor expressed his appreciation for the planning commission efforts. He also mentioned that if they feel threatened that he hopes they will take proper steps in reporting it.

**Paula Sandirk – Funtime Festival**

- Help is needed to run games. There is a 5k run that will take place. The float is getting a facelift and will make its first appearance at the Winlock Egg Days on June 21st. Councilor Don Webster invited her to the Lions Club meeting on Thursday at 5pm. The Lions Club may be able to help.

**CITIZEN COMMENTS – NON-AGENDA ITEMS:** *The recording link can be accessed for entire citizen comments. This is a brief summary and not verbatim.*

- NONE.

**NEW BUSINESS**

**VOUCHERS- M. WHITTEN**

**The following voucher/warrants/electronic payments are approved for payment:**

| | | | | |
|---|---|---|---|---|
| Accounts Payable | 32 | 131 | 71,226.89 | 39799-39830 |
| Electronic Payments | 2 | 2 | 112.69 | EFT*20250607-08 |
| Payroll Vendors | 1 | 1 | 1,241.00 | 39798 |
| Electronic Payroll | 6 | 6 | 51,369.97 | EFT*20250601-06 |
| ACH Direct Deposit | 17 | 17 | 40,091.61 | Payroll 5/16-5/31, 2025 |
| **Total Vouchers** | 58 | 157 | 164042.16 | |

| | | |
|---|---|---|
| **MOVED:** | Don Webster | Motion: Pay the bills. Approval of the Vouchers dated June 2025 First Council Meeting. |
| **SECONDED:** | Ivan Wiediger | |
| *Discussion: No Discussion.* | | |
| **VOTE ON MAIN MOTION:** | 4-0 Motion Carried: 4 aye and 0 nay. | |

**AM25-06 LIQUOR LICENSE RENEW ARCO – R. DENHAM**

| | | |
|---|---|---|
| **MOVED:** | Don Webster | Motion: Approve AM 25-06 Liquor license renewal. |
| **SECONDED:** | Brian Watson | |
| *Discussion: No Discussion.* | | |
| **VOTE ON MAIN MOTION:** | 4-0 Motion Carried: 4 aye and 0 nay. | |

**PW CONTRACT: WESTERN UNITED CIVIL GROUP, LLC FOR JEFFERSON STATION – B. MORRIS**

| | | |
|---|---|---|
| **MOVED:** | Ivan Wiediger | Motion: Approve PW Contract for Western United Civil Group. |
| **SECONDED:** | Don Webster | |
| *Discussion: Counselor Ivan Wiediger asked Bryan why the low bid was discarded? Director Morris explained the criteria for the lowest bidder. The original lowest bidder did not meet the Public Works criteria which is 100% of all areas. The lowest bidder missed three, which allowed the city to accept the next bid. Right now, if the project moves along with no change orders, we may be able to keep the $600k the city put towards this project and use the grant money for it.* | | |
| **VOTE ON MAIN MOTION:** | 4-0 Motion Carried: 4 aye and 0 nay. | |

**ADJOURNMENT:** *Meeting Adjourned at approximately 6:21 p.m.*

| | | |
|---|---|---|
| **MOVED:** | Don Webster | Motion: To Adjourn – Close of Meeting |
| **SECONDED:** | Ivan Wiediger | |
| *Discussion: No Discussion.* | | |
| **VOTE ON MAIN MOTION:** | 4-0 Motion Carried: 4 aye and 0 nay. | |

*These minutes are not verbatim. If so desired, a recording of this meeting is available online from freeconferencecall.com or at the link https://fccdl.in/lBKiqpEfiQ .*

**Respectfully submitted,**

Rachelle Denham, City Clerk Shawn O'Neill, Mayor Councilor

# Voucher Report June 24, 2025

June 2025 2nd Council Meeting

| Reference | Date | Amount | Notes |
|---|---|---|---|
| **Reference Number: 39831** | **Aramsco, Inc Interlink Supply** | **$12,999.98** | |
| S7078442 | 6/17/2025 | $603.35 | Graco Conversion kit for Striper |
| S7078442 a | 6/17/2025 | $12,396.63 | Graco Street Swiper/laser kit |
| **Reference Number: 39832** | **Rachelle Denham** | **$167.00** | |
| 2025 AWC Conference travel | 6/18/2025 | $167.00 | 2025 AWC Conf Kennewich 06/24-06/27 |
| **Reference Number: 39833** | **Capital Business Machines** | **$803.20** | |
| INV267617 | 6/13/2025 | $223.19 | 2025 PD/Court 50% 4/1-4/30 |
| INV267769 | 4/15/2025 | $240.99 | 2025 Copies 4/1-430 |
| INV271043 | 6/10/2025 | $108.69 | 2025 PD/Court 50% 5/1-5/30 |
| INV271044 | 6/10/2025 | $230.33 | 2025 Copies 5/1-5/30 |
| **Reference Number: 39834** | **Chehalis Outfitters** | **$235.21** | |
| 039116 | 6/6/2025 | $235.21 | Boot Allowance Morris - Bryan |
| **Reference Number: 39835** | **City of Napavine** | **$732.64** | |
| 2025*06 Acc 1096.0 | 6/20/2025 | $298.65 | 2025- 06 City Water/Sewer |
| 2025*06 Acc 1711.0 | 6/20/2025 | $316.16 | 2025*06 Acc 1711.0 Mayme |
| 2025*06 Acc 3370.0 | 6/20/2025 | $117.83 | 2025*06 Acc 3370.0 Mayme |
| **Reference Number: 39836** | **Confederated Tribes of The Chehalis** | **$1,230.00** | |
| 9582 | 5/31/2025 | $1,230.00 | 2 bookings/14 days |
| **Reference Number: 39837** | **D & D Towing** | **$406.50** | |
| 2025* 6/10 Charger | 6/10/2025 | $406.50 | PD Dodge Charger |
| **Reference Number: 39838** | **Ferrellgas** | **$465.51** | |
| 5009366987 | 4/7/2025 | $465.51 | 2025 City Hall Propane Tank Rental/fuel 13 |

| Reference | Date | Amount | Notes |
|---|---|---|---|
| **Reference Number: 39839** | **Jackson Civil Engineering LLC** | **$1,237.50** | |
| 0016-35-15 | 6/10/2025 | $1,237.50 | Comp Plan |
| **Reference Number: 39840** | **Joseph O. Enbody** | **$2,400.00** | |
| 292051 | 6/8/2025 | $2,400.00 | 2025*May Indigent Defense |
| **Reference Number: 39841** | **LECO Supply, Inc** | **$47.10** | |
| 233059 | 6/9/2025 | $47.10 | 2 ply tp |
| **Reference Number: 39842** | **Lemay Mobile Shredding** | **$69.10** | |
| 4890454S145 | 6/1/2025 | $69.10 | 2025 June Shred PD |
| **Reference Number: 39843** | **Lewis County Communicaton** | **$5,005.00** | |
| 11057 | 6/11/2025 | $5,005.00 | 2025 Second half |
| **Reference Number: 39844** | **Lewis County Fleet Svs.** | **$1,572.82** | |
| 42905 | 6/20/2025 | $1,572.82 | 08 Dodge Alignment |
| **Reference Number: 39845** | **Lewis County Public Health Departm** | **$585.00** | |
| 11043 | 6/9/2025 | $585.00 | 9 water testing bottles |
| **Reference Number: 39846** | **Lewis County Sheriffs Office** | **$1,012.26** | |
| 2025*May Evidence | 6/20/2025 | $1,012.26 | 2025- May Evidence Handling |
| **Reference Number: 39847** | **Quill Corporation** | **$344.37** | |
| 44382031 | 6/2/2025 | $344.37 | paper/tp/pt/thermal |
| **Reference Number: 39848** | **Scheibmeir, Kelly & Nelson P. S** | **$751.25** | |
| 04063 | 6/10/2025 | $751.25 | Indigent Conflict Attarney -Normand |
| **Reference Number: 39849** | **Toledotel** | **$351.27** | |

| Reference | Date | Amount | Notes |
|---|---|---|---|
| 10084412 | 6/1/2025 | $351.27 | 2025 06/01-06/30 VOIP |
| **Reference Number: 39850** | **Traffic Safety Supply Co.** | **$89.55** | |
| INV081223 | 6/4/2025 | $89.55 | 4th Ave NE sign |
| **Reference Number: 39851** | **US Bank Corp Payment Syst** | **$1,221.00** | |
| 019085 Soft Touch Car Wash | 5/13/2025 | $12.45 | Car Wash |
| 021217 Dollar General | 5/13/2025 | $20.35 | animal supplies |
| 050312 Walmart | 5/29/2025 | $26.70 | Wall Clock and Plastic Waste Basket |
| 081228 Post office | 6/3/2025 | $9.96 | postage |
| 102008475 ICC | 5/16/2025 | $305.00 | Resdential Building Inspector Training |
| 113-0805038-7440251 Amazon.com | 5/16/2025 | $108.09 | Color Ink Jet |
| 113-09206179-3065838 Amazon.com | 5/29/2025 | $139.43 | Patrol supplies |
| 113-0960417-2265835 Amazon.com | 6/3/2025 | $46.22 | Printer Supplies |
| 113-3298569-2536268 Amazon.com | 5/6/2025 | $25.14 | Avery Clean Edge Printalble Business Carc |
| 113-3480234-77442451 Amazon.com | 5/7/2025 | $99.20 | No Parking Metal Sign |
| 113-3788121-3493027 Amazon.com | 5/16/2025 | $34.53 | printer supplies |
| 113-6522939-4605829 Amazon.com | 5/14/2025 | $6.48 | office supplies |
| 113-6945643-6485025 Amazon.com | 5/7/2025 | $23.98 | LabelChoice 100 Sheets 3000 Labels |
| 46M672 Sundcadia | 5/21/2025 | $118.80 | Suncadia - Lacie Dewitt |
| 46M672-1 Suncadia | 5/18/2025 | $118.80 | Suncadia - Lacie Dewitt |
| 52777424 MRSC.Org | 5/14/2025 | $40.00 | training |
| 78214323 Free Conference | 5/15/2025 | $3.25 | File Storage 5/15/2025-6/14/2025 |
| 9143485 Arco | 5/9/2025 | $65.59 | Fuel |
| INV307102607 Zoom | 5/27/2025 | $17.03 | Sub period May 25, 2025 - Jun 26, 2025 |
| **Reference Number: 39852** | **US Bank NA Cincinnati** | **$80.00** | |
| 2025 May Inv fees | 6/20/2025 | $80.00 | 2025 -May  Bond Fee |
| **Reference Number: 39853** | **Vision Municipal Solution** | **$837.86** | |
| 09-16089 | 6/17/2025 | $837.86 | 2025 Apr/May billing |

| Reference | Date | Amount | Notes |
|---|---|---|---|
| **Reference Number: 39854** | **Younglove & Coker PLLC** | **$97.50** | |
| 04440 | 5/25/2025 | $97.50 | conflict prosecution mendoza |
| | | | |
| **Reference Number: EFT*20250609** | **Dept of Treasury Internal Revenue S** | **$7,936.06** | |
| Federal Income Tax - 15620 | 6/18/2025 | $467.34 | |
| Federal Income Tax - 15621 | 6/18/2025 | $195.69 | |
| Federal Income Tax - 15622 | 6/18/2025 | $743.97 | |
| Federal Income Tax - 15623 | 6/18/2025 | $561.29 | |
| Federal Income Tax - 15624 | 6/18/2025 | $532.18 | |
| Federal Income Tax - 15625 | 6/18/2025 | $397.16 | |
| Federal Income Tax - 15626 | 6/18/2025 | $361.93 | |
| Federal Income Tax - 15627 | 6/18/2025 | $347.65 | |
| Federal Income Tax - 15628 | 6/18/2025 | $512.88 | |
| Federal Income Tax - 15629 | 6/18/2025 | $97.93 | |
| Federal Income Tax - 15630 | 6/18/2025 | $395.26 | |
| Federal Income Tax - 15631 | 6/18/2025 | $168.21 | |
| Federal Income Tax - 15632 | 6/18/2025 | $269.32 | |
| Federal Income Tax - 15633 | 6/18/2025 | $329.73 | |
| Federal Income Tax - 15634 | 6/18/2025 | $729.61 | |
| Federal Income Tax - 15635 | 6/18/2025 | $190.53 | |
| Medicare - 15620 | 6/18/2025 | $50.09 | |
| Medicare - 15620 (2) | 6/18/2025 | $50.09 | |
| Medicare - 15621 | 6/18/2025 | $44.78 | |
| Medicare - 15621 (2) | 6/18/2025 | $44.78 | |
| Medicare - 15622 | 6/18/2025 | $73.51 | |
| Medicare - 15622 (2) | 6/18/2025 | $73.51 | |
| Medicare - 15623 | 6/18/2025 | $56.28 | |
| Medicare - 15623 (2) | 6/18/2025 | $56.28 | |
| Medicare - 15624 | 6/18/2025 | $55.81 | |
| Medicare - 15624 (2) | 6/18/2025 | $55.81 | |
| Medicare - 15625 | 6/18/2025 | $46.91 | |
| Medicare - 15625 (2) | 6/18/2025 | $46.91 | |

| Reference | Date | Amount | Notes |
|---|---|---|---|
| Medicare - 15626 | 6/18/2025 | $55.03 | |
| Medicare - 15626 (2) | 6/18/2025 | $55.03 | |
| Medicare - 15627 | 6/18/2025 | $41.83 | |
| Medicare - 15627 (2) | 6/18/2025 | $41.83 | |
| Medicare - 15628 | 6/18/2025 | $55.99 | |
| Medicare - 15628 (2) | 6/18/2025 | $55.99 | |
| Medicare - 15629 | 6/18/2025 | $35.22 | |
| Medicare - 15629 (2) | 6/18/2025 | $35.22 | |
| Medicare - 15630 | 6/18/2025 | $47.92 | |
| Medicare - 15630 (2) | 6/18/2025 | $47.92 | |
| Medicare - 15631 | 6/18/2025 | $44.05 | |
| Medicare - 15631 (2) | 6/18/2025 | $44.05 | |
| Medicare - 15632 | 6/18/2025 | $47.30 | |
| Medicare - 15632 (2) | 6/18/2025 | $47.30 | |
| Medicare - 15633 | 6/18/2025 | $54.03 | |
| Medicare - 15633 (2) | 6/18/2025 | $54.03 | |
| Medicare - 15634 | 6/18/2025 | $69.55 | |
| Medicare - 15634 (2) | 6/18/2025 | $69.55 | |
| Medicare - 15635 | 6/18/2025 | $39.39 | |
| Medicare - 15635 (2) | 6/18/2025 | $39.39 | |
| **Reference Number: EFT*20250610** | **Dept of Licensing Firearms Desk** | **$18.00** | |
| NV0000144 Godbey | 6/11/2025 | $18.00 | NV0000144 Godbey |
| **Reference Number: EFT*20250611** | **Dept of Licensing Firearms Desk** | **$18.00** | |
| NV0000143 Lucas | 6/9/2025 | $18.00 | NV0000143 Lucas |
| **Reference Number: EFT*20250612** | **WAVE** | **$112.10** | |
| 138396801-0011544 | 6/1/2025 | $112.10 | 2025- WAVE Phone PD 6/01-6/30 |
| **Reference Number: EFT*20250613** | **WAVE** | **$112.10** | |
| 138091001-0011544 | 6/1/2025 | $112.10 | Mayme 6/01-6/30 |

| Reference | Date | Amount | Notes |
|---|---|---|---|
| **Reference Number: EFT*20250614** | **WAVE** | **$98.43** | |
| 032768701-0011529 | 5/26/2025 | $98.43 | 2025- WAVE Phone & Internet PW 5/23-6/ |
| **Reference Number: EFT*20250615** | **WAVE** | **$112.10** | |
| 138397607-0011544 | 6/1/2025 | $112.10 | 2025 WAVE Internet 6/1-6/30 CH |
| **Reference Number: June 1-15, 2025** | **Payroll Vendor** | **$39,090.46** | |
| ACH Pay - 15620 | 6/18/2025 | $2,421.33 | |
| ACH Pay - 15621 | 6/18/2025 | $2,150.80 | |
| ACH Pay - 15622 | 6/18/2025 | $3,417.44 | |
| ACH Pay - 15623 | 6/18/2025 | $2,712.52 | |
| ACH Pay - 15624 | 6/18/2025 | $2,611.38 | |
| ACH Pay - 15625 | 6/18/2025 | $2,213.27 | |
| ACH Pay - 15626 | 6/18/2025 | $2,299.98 | |
| ACH Pay - 15627 | 6/18/2025 | $2,080.19 | |
| ACH Pay - 15628 | 6/18/2025 | $2,623.82 | |
| ACH Pay - 15629 | 6/18/2025 | $1,870.77 | |
| ACH Pay - 15630 | 6/18/2025 | $2,205.22 | |
| ACH Pay - 15631 | 6/18/2025 | $2,147.48 | |
| ACH Pay - 15632 | 6/18/2025 | $2,238.11 | |
| ACH Pay - 15633 | 6/18/2025 | $2,910.12 | |
| ACH Pay - 15634 | 6/18/2025 | $3,202.25 | |
| ACH Pay - 15635 | 6/18/2025 | $1,985.78 | |
| | **TOTAL** | **$80,238.87** | |

**The following voucher/warrants/electronic payments are approved for payment:**

| | | | | |
|---|---|---|---|---|
| Accounts Payable | 24 | 47 | 32,741.62 | 39831-39854 |
| Electronic Payments | 6 | 6 | 470.73 | EFT*202506010-15 |
| Payroll Vendors | | | | |
| Electronic Payroll | 1 | 1 | 7,936.06 | EFT*20250609 |

| Reference | | Date | Amount | Notes |
|---|---|---|---|---|
| ACH Direct Deposit | 16 | 16 | 39,090.46 | Payroll 6/1-6/15, 2025 |
| **Total Vouchers** | 47 | 70 | $80,238.87 | |

WE, THE FOLLOWING SIGNEES, APPROVE THE VOUCHERS FOR PAYMENT:

MAYOR: _____

TREASURER: _____

COUNCILOR #1: _____

COUNCILOR #2: _____

COUNCILOR #3: _____

COUNCILOR #4: _____

COUNCILOR #5: _____

Police Department - John Brockmueller_____

Public Works/Community Development - Bryan Morris _____

Court- Lacie Dewitt _____

City Clerk - Rachelle Denham:_____

DATED THIS _DAY OF_____,2025

Clerk's Office
407 Birch Ave SW, P. O. Box 810 Napavine, WA 98565
Phone: (360) 262-3547
www.napavine.wa.gov

# NAPAVINE CITY COUNCIL DECISION

**Applicant/Project Name**: Tigers Meadows Phase 1 – Subdivision, Steep Slope Variance, & Boundary Line Adjustment Recommendation

**Date of Written Planning Commission Meeting Decision to Council**: June 2, 2025

**Council Public Meeting:** June 24, 2025

**Council Decision**: ☐ Approved as Presented: Planning Commission Recommendations.

☐ Approved with Additional Council Recommendation:

☐ Denied-Reason(s):

| _____ | _____ | _____ |
|---|---|---|
| MAYOR | Attest: CLERK | DATE |

**All project supporting documentation is located in the community development department.

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## CITY OF NAPAVINE – FINAL ORDER & DECISION

**Planning Commission Recommendation-**

The planning commission recommends that the Napavine City Council approves the project subject to staff report conditions as well as the following:

**Removal of the following CONDITION from the Staff Report:**

***CONDITION OF APPROVAL: If the City approves the proposed development, then the applicant shall mitigate impacts to the Napavine School District by doing one of the following:**

**1) Record a restrictive covenant limiting occupancy of the units to senior adults only for the life of the project;**

**2) Enter into a voluntary mitigation agreement with the Napavine School District to pay a per lot mitigation fee commensurate with its proportionate share of school impacts prior to issuance of first building permit pursuant to RCW 82.02.020.**

**Replaced with the following CONDITION:**

***CONDITION OF APPROVAL: In consideration of impacts to the Napavine School District from development of Phase 1 and 2, the Applicant shall pay a voluntary school mitigation fee of $6,000 per dwelling unit, with payment required prior to issuance of each individual building permit and paid to the Napavine School District.**

**City of Napavine**
407 Birch Ave SW
PO Box 810
Napavine, WA 98565
(360) 262-3547

# TIGER MEADOWS PHASE 1 – SUBDIVISION, STEEP SLOPE VARIANCE, & BOUNDARY LINE ADJUSTMENT
# Recommendation Summary Memorandum

The City of Napavine staff have reviewed the applicant's proposed documents and held a public hearing on the Tiger Meadows Phase 1 subdivision application. The staff report and meeting minutes for the public hearing are attached to this memorandum. The following is a list of recommended conditions of approval from the staff report, as well as major comments and recommendations from the minutes of the planning commission public hearing.

## Staff Report Conditions of Approval:

A. **Prior to Engineering Approval**

1) Applicant shall revise site plan to identify location, species, and size of trees to be planted along the street frontage. Prior to engineering approval, the engineering plans shall identify location, species, and size of trees to be planted along the street frontage.
2) The engineering plans shall provide details regarding main line extensions and placement of all lateral lines for City review and approval.
3) The engineering plans shall identify appropriate cross-connection control and backflow prevention devices for City review and approval.
4) Sewer utility plan sheets and details meeting City standards shall be submitted for review and approval by the City.
5) A final stormwater plan and technical information report shall be submitted for review and approval by the City.
6) Final Engineering Plans shall show for each lot: location within the plat, dimensions of all four sides, and building envelope demonstrating that no lot is being created within a critical area, unless granted by the City. Plans will be reviewed by City prior to final approval.
7) Applicant must submit to the City all applicable State and Federal permits. Applicant shall follow the approved mitigation plan.
8) Applicant will provide and submit final engineering plans that meet Napavine design and engineering standards for review and approval by the City.
9) Final engineering plans shall comply with Chapter 17.20 NMC.
10) Applicant shall provide final engineering plans that comply with NMC 17.60.010.
11) Project specific street designs are required to be submitted for review and approval by the City.
12) Street designs are required to comply with 2B.11 and be submitted for review and approval by the City.

13) Applicant's final civil engineering plans shall comply with Engineering Standard 2B.12 and be submitted for City review and approval.
14) The plans shall show the sight distance area as a clear-view triangle formed on all intersections by extending two lines of specified length.
15) The final Site Plan shall show pavement restoration for review and approval.
16) The Applicant shall submit sidewalk, curb, and gutter designs for review and approval.
17) A street lighting plan in compliance with Napavine Public Works Standard 2D shall be incorporated into final civil engineering plans and be submitted for City review and approval.
18) Applicant shall incorporate Napavine Public Works Standard 2F into engineering plans for City review and approval.
19) a final engineered stormwater plan and technical information report compliant with Chapter 3A and 2019 SWMMWW standards shall be submitted for review and approval by City.
20) Water utility plan sheets and details meeting applicable standards of Chapter 4 shall be submitted for review and approval by the City.
21) Sewer utility plan sheets and details meeting applicable standards of Chapter 5 shall be submitted for review and approval by the City.

B. **Prior to Construction**

1) All water system materials and methods shall be reviewed by the City for compliance with applicable standards.
2) The installer of the backflow preventer shall obtain a plumbing permit.
3) All sewer system materials and methods shall be reviewed by the City for compliance with applicable standards.
4) Erosion control devices shall be installed and shall remain in place until the soil has stabilized.
5) A final stormwater plan shall be submitted for review and approval by the City. All final engineering for street improvements, as well as water and sanitary sewer connections shall be completed and approved prior to construction.
6) Habitat buffer areas shall be marked prior to construction and permanently complying with NMC 14.10.120.
7) Wetland buffer areas shall be marked prior to construction and permanently complying with NMC 14.10.120. Applicant shall install permanent fencing complying with NMC 14.10.120.
8) The Performance Bond shall be in place and proof provided to the City prior to construction.
9) Including excavation, Applicant shall obtain, as applicable, authorization from the Army Corps of Engineers under Section 404 of the Clean Water Act. In addition, Applicant shall obtain required permits from the Washington State Department of Ecology.

10) Including tree and vegetation removal, if merchantable timber is removed/harvested as part of the proposal or future development, a Forest Practices Application (FPA) will be required (Ch. 76.09 RCW and Ch. 222 WAC). The FPA will need to meet the requirements of the Forest Practices Act and rules.
11) Including excavation, Applicant shall obtain a monitoring permit through DAHP. Applicant shall also provide the City with an Incidental Discovery Plan. No site disturbance is allowed on future Phase 2 without prior City land use and final civil engineering approvals for that Phase and securing all required permits.

C. **General**

1) All existing water main must be abandoned and services hooked up to new main.
2) During construction, infiltration facilities shall be tested to verify design infiltration rate. All facilities shall demonstrate ground water separation given the environmentally sensitive areas, high water table, and Class 1 Critical Aquifer Recharge Areas mapped on site.
3) No construction, including excavation and landscaping, will occur within critical areas, unless granted by the City.
4) No construction, including excavation and landscaping, will occur within the steep slope. Fencing may be constructed along the top of steep slope to designate edge of slope and residential lot.
5) No buildings, stormwater ponds, or other structures are allowed within 25 feet of the top of steep slope. A covenant shall be placed on the development as well as a note on the face of the plat.
6) Applicant shall record the City approved Boundary Line Adjustment with Lewis County Auditor's Office and provide a copy of the Recorded document to the City.
7) Any changes alterations that result in a higher impact will require at least an amended SEPA process focused on the increased impact in question or, if significant enough, a new SEPA review for the entire project.
8) All grading and filling of land must utilize only clean fill. All other materials may be considered solid waste and permit approval may be required from your local jurisdictional health department prior to filling. All removed debris resulting from this project must be disposed of at an approved site.
9) Applicant shall follow the recommendations from the Phase 2 Environmental Site Assessment of soil removal from effected areas. Additional soil characterization and removal may be necessary in areas that were not sampled if contamination is observed. One area of note that was noticed in the 2015 aerial images of the proposed project area, is in the northeast section of parcel #018418003000. This area shows a large quantity of stockpiled materials against the tree line with loading/unloading activity occurring in the image. Prior to the soil removal, it is recommended to review Tables 12.1 and 12.2 (pgs. 189-190) in the Guidance for Remediation of Petroleum Contaminated Sites. These tables outline and describe best management practices for the various contaminated soil categories that may be encountered. Applicant is also

required to develop a contaminated media management plan prior to soil removal to ensure excavated soils are removed, stored, and disposed of appropriately. If contamination is discovered or caused during any phase of the project, it must be reported to the Washington State Department of Ecology Environmental Report Tracking System.

10) Applicant will be required to install street frontage improvements to the city of Napavine's standards. Street frontage design shall be submitted with final civil engineering for review and approval by the city of Napavine.
11) During construction, infiltration facilities shall be tested to verify design infiltration rate. All facilities shall demonstrate ground water separation.
12) Lift station failure must over flow to closest manhole and not back up into residences.

**Planning Commission Recommendation**

The planning commission recommends that the Napavine City Council approves subject to staff report conditions as well as the following:

**Removal of the following CONDITION from the Staff Report:**

**CONDITION OF APPROVAL: If the City approves the proposed development, then the applicant shall mitigate impacts to the Napavine School District by doing one of the following:**

1) **Record a restrictive covenant limiting occupancy of the units to senior adults only for the life of the project;**
2) **Enter into a voluntary mitigation agreement with the Napavine School District to pay a per lot mitigation fee commensurate with its proportionate share of school impacts prior to issuance of first building permit pursuant to RCW 82.02.020.**

**Replaced with the following CONDITION:**

**CONDITION OF APPROVAL: In consideration of impacts to the Napavine School District from development of Phase 1 and 2, the Applicant shall pay a voluntary school mitigation fee of $6,000 per dwelling unit, with payment required prior to issuance of each individual building permit and paid to the Napavine School District.**

**City of Napavine**
407 Birch Ave SW
PO Box 810
Napavine, WA 98565
(360) 262-3547

# Notice of Public Hearing

**NOTICE IS HEREBY GIVEN** that city of Napavine has received a Preliminary Plat residential subdivision application packet, steep slope variance, boundary line adjustment, and SEPA Checklist from Enzo Holdings (John Mastandrea) for the following development proposal:

**Project Proposal:** Enzo Holdings, LLC is applying for permits to construct a two-phase residential development with 195 single-family lots. Phase 1 consists of 56 single family residential lots. Phase 2 proposes up to an additional 139 lots. The proposed development will be located on land that is currently three separate tax parcels totaling 69.13 acres. A Critical Areas Report has been prepared as required by this ordinance to address the critical areas and regulatory buffers that are present on the project site. A mitigation plan has also been prepared to address all impacts to critical areas and their buffers.

**Project Location:** Parcels#018418003000 Section 35 Township 13N Range 02W E2 W2 NE NW
#018418001000 Section 35 Township 13N Range 02W E2 N3/4 NE4 NW4
#018409000000 Section 35 Township 13N Range 02W NW4 NE4 & S2 SE4

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**Hearing Date and Location:** **June 2, 2025 6:00 PM**
**Napavine City Hall - Council Chambers**
**407 Birch Ave SW**
**Napavine WA 98565**

**City Contact:**
Bryan Morris, Director of Public Works
Phone: (360) 262-9344
Email: bmorris@cityofnapavine.com
Mail: PO Box 810, Napavine, WA 98565

**View the complete application online:**
https://www.cityofnapavine.com/communitydev/page/public-notices

| | |
|---|---|
| **Date Application Received:** | **June 20, 2024** |
| **Date of Complete Application:** | **August 8, 2024** |
| **Date of Notice of Application:** | **August 22, 2024** |
| **Hearing Date:** | **June 2, 2025** |

Anyone interested may appear and be heard at the hearing or submit comments in writing to Bryan Morris. The Planning Commission will make a recommendation to City Council. Any aggrieved party of record can file an appeal with Lewis County Superior Court within 21 days of the Notice of Council's Decision date. If you have any questions, please visit the website or call.

****WRITTEN PUBLIC COMMENTS CAN BE ACCEPTED UNTIL 4:30 PM ON June 2, 2025****

# City of Napavine Community Development

## R2 RESIDENTIAL DISTRICT
## Notice of Application
## TIGER MEADOWS PHASE 1 – SUBDIVISION, STEEP SLOPE VARIANCE, & BOUNDARY LINE ADJUSTMENT

**NOTICE IS HEREBY GIVEN** that city of Napavine has received a Preliminary Plat residential subdivision application packet, steep slope variance, boundary line adjustment, and SEPA Checklist from Enzo Holdings (John Mastandrea) for the following development proposal:

**Project Proposal:** Enzo Holdings, LLC is applying for permits to construct a two-phase residential development with 195 single-family lots. Phase 1 consists of 56 single family residential lots. Phase 2 proposes up to an additional 139 lots. The proposed development will be located on land that is currently three separate tax parcels totaling 69.13 acres. A Critical Areas Report has been prepared as required by this ordinance to address the critical areas and regulatory buffers that are present on the project site. A mitigation plan has also been prepared to address all impacts to critical areas and their buffers.

**Project Location:** Parcels#018418003000 Section35 Township 13N Range 02W E2 W2 NE NW
#018418001000 Section 35 Township 13N Range 02W E2 N3/4 NE4 NW4
#018409000000 Section 35 Township 13N Range 02W NW4 NE4 & S2 SE4

**Comments Due by**: September 16, 2024

**Environmental Determination:** MDNS

**Project documents are available for review at:**
Napavine City Hall
407 Birch Ave SW
Napavine, WA 98565

**Contact:** Send written comments to:
Bryan Morris, Public Works/Community Development Director
Phone: (360) 262-3547
Email: bmorris@cityofnapavine.com
Mail: PO Box 810, Napavine, WA 98565

| | |
|---|---|
| **Date Application Received:** | **June 20, 2024** |
| **Date of Complete Application:** | **August 8, 2024** |
| **Date of Notice of Application:** | **August 22, 2024** |
| **Hearing Date:** | **June 2, 2025** |

| | |
|---|---|
| Pre-Application Meeting: | December 20, 2023 |
| Pre-Application Meeting Notes: | December 28, 2023 |
| Boundary Line Adjustment Application: | May 24, 2024 |
| Preliminary Plat Application (unsigned): | June 20, 2024 |
| SEPA Checklist (unsigned): | June 20, 2024 |
| Preliminary Plat Ph1 Plans (1st Draft): | June 20, 2024 |
| Subdivision Land Use Code Memo: | June 20, 2024 |
| Traffic Impact Analysis (TIA): | June 20, 2024 |
| Geotechnical Report: | June 20, 2024 |
| Critical Areas Report: | June 20, 2024 |
| Phase 2 Environmental Site Assessment: | June 20, 2024 |
| Phase 1 Preliminary Plat Drainage Report: | June 20, 2024 |
| Sewer Extension & Basin Map: | June 20, 2024 |
| Site Distance Memo: | June 20, 2024 |
| Boundary Line Adjustment Map: | June 21, 2024 |
| Project Placed On- Hold: | July 9, 2024 |
| Soil Reinforcement in Landslide Hazard Area Memo: | July 16, 2024 |
| Preliminary Plat Ph1 Plans (1st Revision): | July 18, 2024 |
| Critical Areas Variance – Steep Slope Memo/Application: | July 18, 2024 |
| Fire Hydrant Flow Test: | July 18, 2024 |
| Follow-Up Letter Notice of Continued Hold on Project: | July 22, 2029 |
| Wetland Buffer Plan – Phase 1: | July 23, 2024 |
| Steep Slope Modeling Memo – Setback Reduction: | July 29, 2024 |
| Preliminary Plat Ph1 Plans (2nd Revision): | July 30, 2024 |
| Preliminary Plat Ph1 Plans (3rd Revision): | August 8, 2024 |
| Preliminary Plat Application (Signed): | August 8, 2024 |
| SEPA Checklist (Signed): | August 8, 2024 |
| Landscape Plans | August 8, 2024 |
| Plat Lighting Study | August 8, 2024 |
| Notice to Applicant Project Hold Removed: | August 8, 2024 |
| Application Deemed Technically Complete (TC): | August 8, 2024 |
| Notice of Application & SEPA Determination: | August 22, 2024 |
| End of Comment Period: | September 16, 2024 |
| Notice to Applicant Project on Hold to Address Agency SEPA Comments & Requests | September 20, 2024 |
| Cultural Resource Assessment – Phase 1 | November 19, 2024 |
| Conceptual Wetland Mitigation Plan – Phases 1 & 2 | November 25, 2024 |
| Applicant's SEPA Response Memo | November 25, 2024 |
| Revised Site Plan Sheet Identifying Wetlands Phase 1 & Phase 2 | December 27, 2024 |
| Agency Comments Satisfied & Project Hold Removed: | January 8, 2025 |
| Applicant Notified 21 Days to Respond to School Related SEPA Comments | January 8, 2025 |
| Napavine School District Superintendent Shane Schutz Declaration & Exhibits | February 28, 2025 |
| School District Provided SEPA Related Documentation – Mitigation Fee Study | March 4, 2025 |
| Revised Boundary Line Adjustment Map | March 11, 2025 |
| Applicant Response to School Mitigation Fee Report | April 7, 2025 |
| Staff Report Issued: | April 24, 2025 |
| Notice of Public Hearing: | April 25, 2025 |
| Planning Commission Hearing Date: | June 2, 2025 |
| City Council City Council Closed Record Decision: | TBD |

Comments about this application may be submitted to the Napavine City Hall by September 16, 2024. A hearing date will be scheduled before the city of Napavine's Planning Commission, followed by City Council rendering a decision after the completion of the environmental review, comment period, and completion of staff report. Once the hearing date is set, the notice of hearing will be issued providing the time, date and hearing attendance information of this public hearing.

Emailed on: April 24, 2025 Project Name: TIGER MEADOWS PHASE 1

**Recommendation: Approve subject to Conditions**

**City of Napavine Community Development Director's initials:** BM

**Date issued:** 4/24/25

*TABLE OF CONTENTS*

## I. BACKGROUND

A. General Site Information

| | |
|---|---|
| Parcel/Tract ID: | 018418003000 – Proposed BLA would reshape property to include entire Phase 1. |
| Parcel Zone: | Residential (R2) |
| Size of Site: | 9.85 acres (current) – 17.77 acres (BLA reshape) |
| Existing Vegetation: | Vacant. Primarily pasture grass. Will include part of forested area of Parcel 018418001000 |
| Existing Structures: | None. |
| Adjacent Land Uses: | Site is surrounded by forest to the north and east, Napavine School District to the west, and Woodard Rd and farming to the south. |
| Adjacent Zoning: | The east and south parcels zoned residential, public/government to the west, and mining/forestry to the north. |
| Topography: | Slopes 5%-45%. |
| Wetlands: | Single Type II wetland with Type F stream |
| Flood Plain: | None. |
| Shoreline Jurisdiction: | None. |
| Access Roads: | Woodard Rd. |

| | |
|---|---|
| Parcel/Tract ID: | 018418001000 – Proposed BLA would reshape property to include part of Phase 2 |
| Parcel Zone: | Residential (R2) |
| Size of Site: | 15.04 acres (current) – 9.8 acres (BLA reshape) |
| Existing Vegetation: | Vacant. Primarily forested |
| Existing Structures: | None. |
| Adjacent Land Uses: | Site is surrounded by forest to the north and east, Phase 1 to the west, and Woodard Rd and farming to the south. |
| Adjacent Zoning: | The west, east and south parcels zoned residential and mining/forestry to the north. |
| Topography: | Slopes generally 45%. |
| Wetlands: | Single Type II wetland with Type F stream. |
| Flood Plain: | None. |
| Shoreline Jurisdiction: | None. |
| Access Roads: | Woodard RD. |

| | |
|---|---|
| Parcel/Tract ID: | 018409000000 – Proposed BLA would reshape property to include most of Phase 2 |
| Parcel Zone: | Residential (R2) |
| Size of Site: | 44.24 acres (current) – 41.58 acres (BLA reshape) |
| Existing Vegetation: | Vacant. Primarily pasture grass with some forested areas in the upper north east corner |
| Existing Structures: | None. |

| | |
|---|---|
| Adjacent Land Uses: | Site is surrounded by forest to the north and east, vacant forested to the west, and Woodard Rd and farming to the south. |
| Adjacent Zoning: | The west, east and south parcels zoned residential and mining/forestry to the north. |
| Topography: | Slopes 5%-30%. |
| Wetlands: | One Type IV wetland and one Type II wetland. |
| Flood Plain: | None. |
| Shoreline Jurisdiction: | None. |
| Access Roads: | Woodard Rd. |

B.Land Use Processing

| | |
|---|---|
| *Revised Application Submitted:* | *October 4, 2024* |
| *Letter of Incomplete:* | *October 28, 2024* |
| *Application Complete:* | *November 18, 2024* |
| *Application & SEPA Comment Period* | *November 19 – December 10, 2024* |
| *Staff Report:* | *February 19, 2025* |
| *Planning Commission Hearing:* | *June 2, 2025* |
| *City Council Decision:* | *TBD* |

C. Project Narrative

The site is located along Woodard Rd. The site is identified as Parcel 018418003000 by Lewis County and is currently 9.85 acres in size. With the impending Boundary Line Adjustment (BLA), the property would be enlarged to 17.77 acres. The site is currently undeveloped, zoned Residential (R2) within the city of Napavine.

Enzo Holdings, LLC is proposing a two-phase master plan residential development with 193 single-family lots. The proposed development will be located on land that is currently three separate tax parcels totaling 69.13 acres. The current application is only for 55 lots comprising Phase 1. The Applicant is also proposing a BLA as part of Phase 1 approval.

A Critical Areas Report has been prepared as required by this ordinance to address the critical areas and regulatory buffers that are present on the project site. A mitigation plan has also been prepared to address impacts to critical areas and their buffers. State agencies conducted a site visit to verify onsite wetlands and habitat areas.

A geotechnical study and follow up analysis was performed onsite. The Applicant's licensed geologist provided a recommended setback from top of slope, set of construction methods, and building size/load recommendations. No lots will be created within the steep slopes, but some lots do contain setback areas.

During the SEPA comment period, the Washington State Department of Archaeology & Historic Preservation (DAHP) determined the project area is high risk potential to contain archaeological resources and that the Applicant conduct a professional archaeological survey. The study for Phase 1 area only was provided to the City and DAHP.

Access to Phase 1 will occur off of Woodard Rd. The Applicant is proposing roadways that will comply with City requirements including half street improvements along Woodard Rd.

The required streets, storm sewer, sanitary sewer, water distribution lines, sidewalks street name signs, curb and gutter and stormwater detention ponds will be constructed by the Applicant as required by the City. Applicant provided a storm drainage and erosion control plan. Phase 1 will meet current Department of Ecology Stormwater Management Manual for Western Washington.

***Figure 1. Location of Properties***

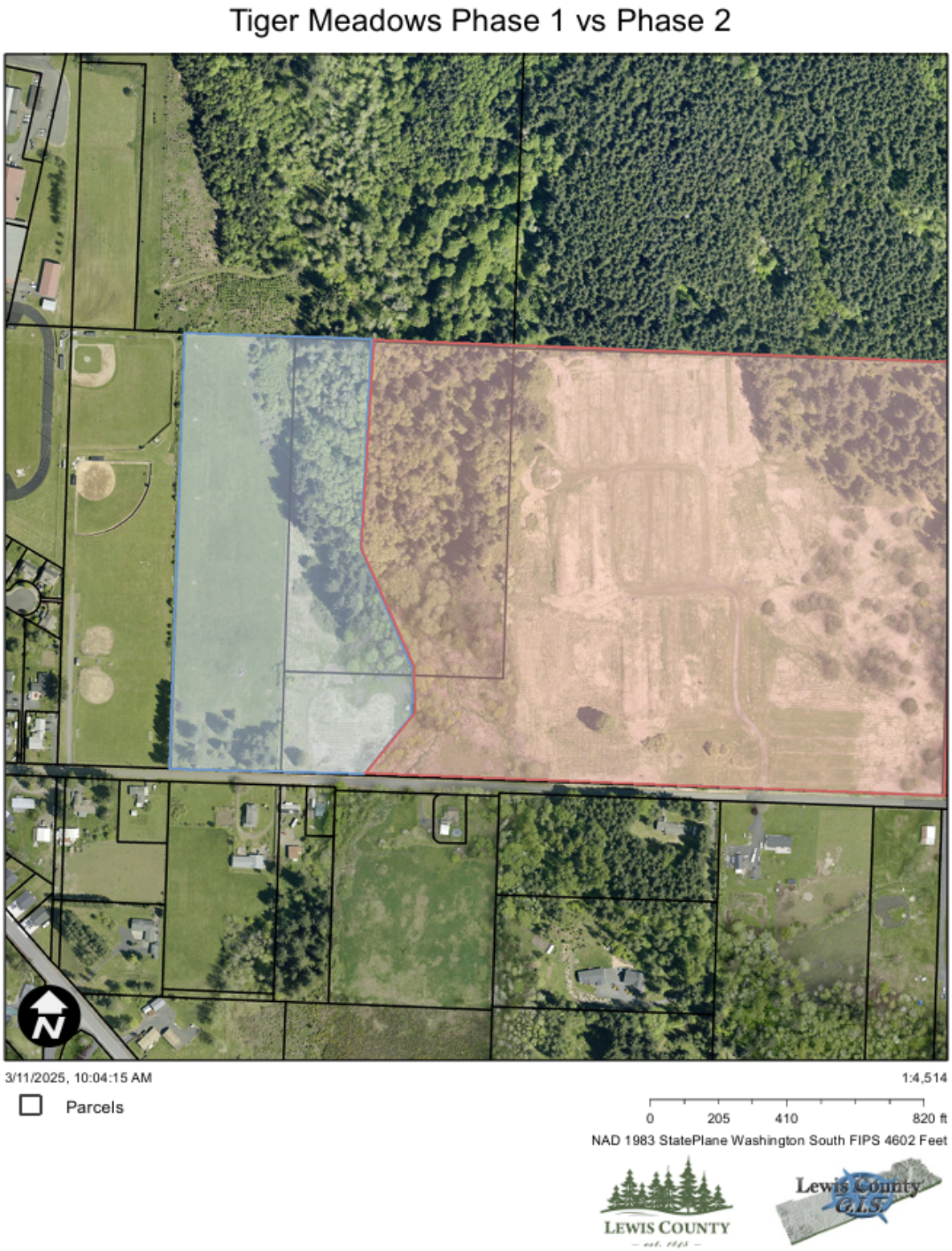
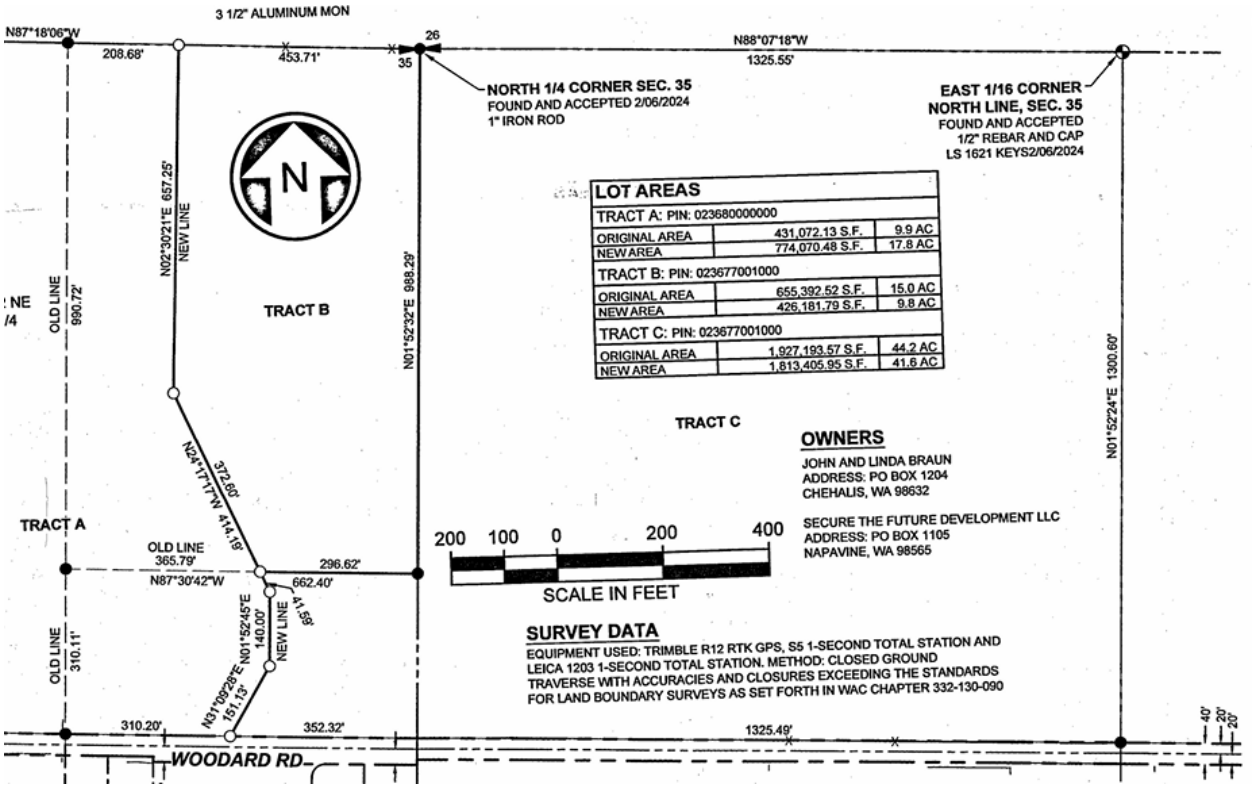


***Figure 2. Proposed Boundary Line Adjustment of Properties***



## II. DOCUMENTS REVIEWED

The documents reviewed and considered in connection with this staff report include the following:

A. Boundary Line Adjustment (BLA) Application
B. Subdivision Land Use Code Memo
C. Traffic Impact Analysis (TIA)
D. Site Distance Memo
E. Geotechnical Report
F. Critical Areas Report (CAR)
G. Phase 2 Environmental Site Assessment
H. Phase 1 Preliminary Plat Drainage Report
I. Sewer Extension & Basin Map
J. Soil Reinforcement in Landslide Hazard Area Memo
K. Critical Areas Variance – Steep Slope Memo/Application
L. Fire Hydrant Flow Test
M. Wetland Conceptual Buffer Plan – Phase 1
N. Steep Slope Modeling Memo – Setback Reduction
O. Preliminary Plat Application (Signed)
P. SEPA Checklist (Signed)
Q. Preliminary Plat Phase 1 Plans (3rd Revision)
R. Landscape Plans
S. Plat Lighting Study
T. SEPA Comment Folder – 49 Comments Received (Comment Period Aug 22 – Sept 16)
U. Cultural Resource Assessment – Phase 1
V. Conceptual Wetland Mitigation Plan – Phases 1 & 2
W. Applicant's SEPA Response Memo
X. Revised Site Plan Sheet Identifying Wetlands Phase 1 & Phase 2
Y. Napavine School District Superintendent Shane Schutz Declaration & Exhibits
Z. Napavine School District Mitigation Fee Study
AA. Revised Boundary Line Adjustment Map
BB. Applicant Response to School Mitigation Fee Report
CC. Napavine School District Mitigation Fee Study Addendum
DD. General documents (i.e., legal description, owner consent, and permit application documents etc.)

## III. AUTHORITY

Authority for this review is included in the Napavine Municipal Code (NMC). Including, Title 12 NMC "Streets, Sidewalk and Public Places"; Title 13 NMC "Public Services"; Title 14 NMC "Critical Areas", Title 16 NMC "Subdivisions", Title 17 NMC "Zoning, Title 18 "Environment", and Napavine Public Works Standards. A public hearing will be conducted in accordance with rules of procedure adopted by NMC. The final decision on Type III Application will be made by the Napavine City Council.

## IV. APPLICABLE REGULATIONS/ANALYSIS

A. NAPAVINE MUNICIPAL CODE

*Title 12 STREETS, SIDEWALKS AND PUBLIC PLACES*

*Chapter 12.04 Public Works Construction Standards*

*12.04.010 Standards adopted*

*There is adopted by reference for the purpose of establishing rules and regulations for the installation, construction and maintenance of public works projects in the city, the Standard Specifications for Municipal Public Works Construction, '2018 Version, as prepared by Washington State Chapter, American Public Works Association (APWA) referred to as Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction, together with any amendments thereof or additions thereto now existing or made hereafter.*

**FINDING:** This standard applies.

*12.04.040 Design standards*

*There are adopted design standards for the construction of streets and sidewalks as follows in Sections 12.04.050 and 12.04.060.*

**FINDING:** This standard applies.

*12.04.050 Streets, alleys, cul-de-sacs, side slopes, base, and roadway grade*

*Arterial streets, collector streets, access streets, residential streets, feeder streets, alleys, cul-de-sacs, side slopes, base, and roadway grades shall be, and the same hereby are, defined as set forth in the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction for said improvements as adopted and posted from time to time by the Public Works Director of the City of Napavine, Washington. Copies of said specifications and standards are on file with the city and may be reviewed at any time during normal city business hours.*

**FINDING:** This standard applies.

*Chapter 12.08 Construction In Public Places*

*12.08.010 Work obstructing public places*

*A. All persons, corporations and/or utilities desiring to perform work upon, obstructing or making installations that cause disturbance, disruption, or damage to city streets, alleys, rights-of-way, bridges, parking lots, parks or other public places within the city are required to obtain a permit from the city mayor or his designated representative before proceeding therewith.*

*B. The city mayor or his designated representative is authorized and directed to require applications for the performance of work, obstructing or making installations on city streets, alleys, rights-of-way, bridges, parking lots, parks or other public places upon such forms and regulations as are or hereafter shall be approved by resolution of the city mayor.*

*C. The city council is authorized to adopt fee schedules, forms and regulations, by resolution, to carry into effect the intent of this section.*

**FINDING:** This standard applies.

*Chapter 12.14 STREET TREES*

*12.14.010 Street trees authorization.*

*All boulevard, arterial, and collector streets in the city may be planted with trees to create a distinct and pleasant character for those roadways.*

*12.14.020 Purpose.*

*It is a goal of the city to create attractive patterns to be followed and to create distinctive character where it is presently lacking.*

*12.14.030 Authorized trees.*

*The street trees in Table I, attached as exhibit "A", shall be employed when planting street trees in or along the public right-of-way.*

*12.14.040 Planting theme.*

*Where an accent tree theme has been identified by the city of Napavine public superintendent it shall consist of the following planting scheme:*

*Ratio: Two street trees to one accent tree.*

*Species: See following table as per Section 12.14.030.*

*12.14.050 Planting size.*

*Street trees shall be two to three inch caliper, measured six inches above the base.*

*12.14.060 Planting location.*

*A. Street trees shall be located at least four feet behind the backside of the curb.*

*B. Street trees shall be spaced thirty-five feet on center starting fifteen feet from property line.*

*C. Street tree spacing may be adjusted slightly to allow a ten-foot clean zone on either side of a driveway.*

*D. Street trees will be planted at least fifteen feet from utility lines.*

*12.14.070 Street tree maintenance.*

*All developments required to plant street trees will also be required to maintain the trees for the life of the project regardless of ownership.*

*12.14.080 Street tree themes.*

*A. The planting theme may be made by the director of public works with concurrence of the city council.*

*B. Exceptions include, but are not limited to screening industrial areas: planting around historical sites: maintaining natural vegetation that better serves as street landscaping or beautification.*

*C. All trees and shrubs hereafter planted in any parking strip or other public place in any residential area in the city of Napavine shall generally conform as to species, types, and location of any trees or shrubs adjacent to the property to be planted.*

*12.14.090 Guarding street trees against damage from construction work.*

*Any person, firm or corporation engaged in the construction, alteration or repair of any building or portion thereof in the city of Napavine shall prior to commencement of such construction, place proper guards around trees and shrubs located within the limits of streets and alleys where such construction, alteration or repair is being carried on, to effectively protect trees and shrubs from damage or injury.*

*12.14.100 Types of street trees prohibited.*

*It shall be unlawful to plant in any parking strip or public place in any residential area of the city of Napavine any of the following trees: Poplar, willow, cottonwood, fruit trees (except ornamental types), nut trees, mountain ash, Oregon or big leaf maple or any other type or species of tree having any growth characteristic similar to those set forth above.*

*12.14.105 Types of trees permitted.*

*The named trees in Table II attached as exhibit "B" shall be permitted in the parking strips or public places of any residential area.*

*12.14.110 Permit to trim.*

*It is unlawful for any person, firm or corporation; to in any manner, remove, destroy, or cut any tree or shrub now or hereafter planted within the limits of any street or alley in the city of Napavine without having first obtained a permit so to do with the compliance of a standard reference guide.*

**Exhibit "A"**
**Table I as per Section 12.14.030**

**The listed trees may be employed in or along public right-of-way to city standards according to the following placement criteria:**

**No power lines in planting strips over ten feet wide:**

| | |
|---|---|
| **Beech** | **Fagus grandifolia, Fagus sylvatica and various forms** |
| **Chinese Paper Birch** | **Betula albo-sinesis var. septentrionalis** |
| **Paper Birch** | **Betula papyrifera** |
| **River Birch, Yellow Birch** | **Betula nigra. Betula alleghamiensis** |
| **Ginkgo** | **Ginkgo biloba** |
| **Coliseum Maple** | **Acer cappadocicum** |
| **Hedge Maple** | **Acre campestre** |
| **Norway Maple** | **Acre platonoides** |
| **Sugar Maple, Red Maple** | **Acre saccharum, rugrum** |
| **Sycamore Maple** | **Acre pseudoplatanus** |
| **Oaks Pin, Red, Scarlet** | **Quercus palustris, Q. rubra, Q. cocciniea** |
| **Shingle Oak** | **Quercus imbricaria** |
| **Shumard Oak** | **Quercus shumaridii** |
| **Willow Oak** | **Quercus phellos** |
| **Sweetgum** | **Liquidambar styraciflua** |
| **Cryptomeria** | **Cryptomeria japonica** |
| **Dawn Redwood (deciduous)** | **Metasequoia glyptostroboides** |

**No power lines with planting strips five to six feet wide:**

**(Caution - such narrow strips require more tree maintenance)**

| | |
|---|---|
| **Pillar crabapple** | **Malus tschonoskii** |
| **Crape-Myrtle** | **Lagerstroemia indica** |
| **Hornbeam** | **Carpinus betuls, Carpinus caroliniana** |
| **Japanese Tree-Lilac** | **Syringa reticulata** |
| **Star Magnolia (tree form)** | **Magnolia stellata tree form** |
| **Amur Maple** | **Acer ginnala tree form** |
| **Trident Maple** | **Acer buergeranum** |
| **Eastern Redbud** | **Cercis canadensis** |
| **Russian Olive** | **Eleagnus angustifolia** |
| **Callery pear** | **Pyrus calleryana, <u>not</u> 'Bradford'** |
| **Sourwood** | **Oxydendrum arboreum** |
| **Chinese Windmill Palm** | **Trachycarpus fortunei** |

**Table I as per Section 12.14.030 (Continued)**

**No power lines with planting strips over six feet wide:**

| | |
|---|---|
| **Kousa Dogwood** | **Cornuskousa** |
| **Evergreen Magnolia** | **Magnolia grandifiora** |
| **Kobus Magnolia** | **Magnolia kobus** |
| **Yulan Magnolia** | **Magnolia denudata** |
| **Fruitless Mulberry** | **Morus Fruitless cultivars** |
| **Pissard plum** | **Prunus cerasifera'Pissardii'** |
| **Chinese Quince** | **Pseudocydonia sinenesis** |
| **Carolina Silverbell** | **Halesia monticola, Halesia caroliniana** |
| **American Smoke Tree** | **Cotinus obovatus** |
| **Stewartias** | **Stewartia monadelpha, Stewartia pseudocamellia** |
| **Swedish Whitebeam** | **Sorbus aria** |
| **Finnish Whitebeam** | **Sorbus intermedia** |
| **Evergreens:** | |
| **Cork Oak** | **Quercus suber** |
| **Holly Oak** | **Quercus ilex** |
| **Tanoak** | **Lithocarpus densiflora** |

**No power lines with planting strips over eight feet wide:**

| | |
|---|---|
| **Antarctic Beech** | **Nothofagus antarctica, N. dombeyi, N. obliqua** |
| **Jacquemont Birch** | **Betula utilis var.jacquemontii** |
| **Disease-resistant Crabapples** | **Mains sp. (taller growing varieties)** |
| **Eucommia** | **Eucommia ulmoides** |
| **Euodia** | **Tetradiu daniellii** |
| **Hackberry** | **celtis occidentalis** |
| **Honey locust** | **Gleditsia triacanthos 'Inermis'** |
| **Linden, Basswood** | **Tilia: cordata, tomentosa, euchlora, heterophylla** |
| **Golden Locust** | **Robinia pseudoacacia 'Frisia'** |
| **Idaho Locust** | **Robinia 'Idaho'** |
| **Maackia** | **Maackia amurensis, Maackia chinensis** |
| **Big leaf Magnolia** | **Magnolia tripetala, Magnolia fraseri** |
| **Montpelier Maple** | **Acer monspessulanum** |
| **Pacific Sunset,** | |

| | |
|---|---|
| **Norwegian Sunset Maples** | **Acer x 'Pacific Sunset,' 'Norwegian Sunset'** |
| **Striped-bark Maples** | **Quercus nigra** |
| **Phellodendron** | **Phellodendron amurense** |
| **Pagoda Tree** | **Sophora japonica** |
| **Sassafrass** | **Sassafras albidum** |
| **Silf tree** | **Albizzia julibrissin** |
| **Tupelo** | **Nyssa Sylvatica** |
| **Yellowwood** | **Cladrastis kentukea (Cladrastis lutea)** |
| **Zelkova** | **Zelkova serrata** |
| **Evergreens:** | |
| **Bamboo-leafed Oak** | **Quercus myrsinifolia** |

**Exhibit "B"**
**Table II as per Section 12.14.100**

**The following listed trees may be employed under power lines in:**
**parking strips or public places to city standards**
**according to the following placement criteria:**

**Under power lines or in view corridors with planting strips six feet to ten feet wide:**

| | |
|---|---|
| **Japanese angelica** | **Saralia data** |
| **Pillar Crabapple** | **Malus tschonoskii** |
| **Crape-Myrtle** | **Lagerstroemia indica** |
| **Japanese Tree-Lilac** | **Syringa reticulata** |
| **Star Magnolia (tree form)** | **Magnolia stellata tree form** |
| **Amur Maple** | **Acer ginnala tree form** |
| **Trident Maple** | **Acer buergeranum** |
| **Eastern Redbud** | **Cercis canadensis** |
| **Russian Olive** | **Eleagnus angustifolia** |
| **Sourwood** | **Oxydendroum arboreum** |

**Under power lines or in view corridors with planting strip ten-foot wide or more:**

| | |
|---|---|
| **Disease-resistant Crabapples** | **'Malus x Zumi,' 'Prairiefire,' 'Snowdrift'** |
| **Cornelian-cherry Dogwood** | **Cornus mas** |
| **Kousa Dogwood** | **Cornus kousa** |
| **Pagoda Dogwood, Giant Dogwood** | **Cornus alternifolia, Cornus contoversa** |
| **Harlequin Glorybower** | **Clerodendrum trichotomum** |
| **Judas Tree** | **Cercis siliquastrum** |
| **Saucer Magnolia** | **Magnolia soulangiana** |
| **Star Magnolia (multi-stemmed)** | **Magnolia stellata** |
| **Amur Maple (multi-stemmed)** | **Acer ginnala** |
| **Paperbark Maple** | **Acer griseum** |
| **Shantung Maple** | **Acer truncatum** |
| **Japanese Maple** | **Acer palmatum** |
| **Persian Ironwood** | **Parrottia persica** |
| **'Newport' Purple Plum** | **Prunus cerasifera 'Newport'** |
| **Soumac** | **Rhus typhina, Phus glabra** |

**Japanese Snowball** **Styrax japonica**

**FINDING:** The submitted site plan indicates street trees on all roadway cross sections. This standard applies.

**CONDITION OF APPROVAL: Applicant shall revise site plan as well as submit a landscape plan that identifies location, species, and size of trees to be planted along the street frontage. Prior to engineering approval, the engineering plans shall identify location, species, and size of trees to be planted along the street frontage.**

*Title 13 PUBLIC SERVICES*

*13.02 Water Connection Condition and design standards under NMC Title 13*

*13.02.020 Application for connection.*

*A. All new connections, whether inside or outside the city limits shall be metered.*

*1. Commercial. One meter may serve more than one business if in the same building, if separate buildings, separate meters are required.*

*2. Residential. Separate meters shall be required for all single-family residences. All motels, hotels, recreational vehicle parks, multi-dwellings, condominiums, planned unit developments, and apartments may be served by one meter.*

*A. Each premise shall have separate water service or services as set forth in NMC 13.02.030, Water services for premises. Any person desiring water service for any premises shall make application therefore on a printed form furnished by the city for that purpose…*

*B. Applicants for service within the corporate limits of the city may be required to obtain a building or plumbing permit for the premises where water service is being requested.*

*E. When all applicable fees and charges have been paid, the approved application shall constitute an agreement whereby the applicant agrees, as a condition for the continued use of water, to conform to rules and regulations of the city as contained in or attached to the application provided for in this chapter, or any amendment hereto.*

*F. The application for water service shall contain an agreement requiring the person making the same to pay for the water applied for at the rates and in the manner specified by city ordinance; reserving unto the city the right to charge and collect the rates and to enforce the penalties provided in city ordinance and to change the rates by ordinance at any time; allowing the city to temporarily discontinue the service at any time without notice to the customer; and specifying that said agreement is subject to all the provisions of this chapter and of any ordinance of the city relating to the public water system of the city. The agreement shall provide that the city shall not be held responsible for any damage by water or other cause resulting from defective plumbing or appliances on the premises supplied with water installed by the owner or occupant of such premises, and shall provide that in the event the supply of water shall be interrupted or fail by reason of accident or any other cause whatsoever, the city shall not be liable for damages for such interruptions or failures, nor shall such failures or interruptions for any reasonable period of time be held to constitute a breach of agreement on the part of the city or in any way relieve the customer from performing the obligations of his agreement. The city shall not be held liable for*

*damage to personal property stored in the portion of the street between the curb and the property line, nor to real property in said area, resulting from leakage or the breaking of pipes or appliances maintained by the city within that portion of the street herein described. All agreements contained in the application shall take effect from the date the application is approved by the public works director. If for any reason the public works director does not approve an application requiring his approval, the public works director shall explain the reason for disapproval in writing at the request of the applicant, and no conditions or agreements shall be in effect.*

*13.02.030 Water service for premises.*

*Each premise shall have a separate water service or services. All water services shall be metered. Premises containing multiple dwelling units and/or containing more than one commercial or industrial business shall have separate metered water service for each individual dwelling unit and/or commercial or industrial unit, except where situations and/or special conditions exist that make an individual service for each unit impossible or unfeasible. The public works director and city clerk shall determine when such situations or conditions prohibit individual services. The public works director may recommend that structures be serviced by a single meter at the curb side of city streets with an individual meter at each dwelling unit for leak control at the expense of the property owner.*

*A. The public works director may authorize the installation of one or more metered services for such installation.*

*B. Installation of new private wells within the city's water service area for purposes of providing water service to residential or commercial properties are not allowed unless otherwise approved by the city council. Requests for private wells must be made to the city council with supporting information supplied by the requester showing that existing facilities are greater than two hundred feet from the property being developed or built on and that, in the opinion of the city council, there is an undue hardship on the applicant if they are required to connect to the public water system.*

*C. All existing wells located on parcels of land that are being developed or subdivided must be decommissioned and all water rights transferred to the city. Any existing wells located on parcels of land that are being developed or subdivided and that are serviced by municipal water must be segregated and approved by city council for irrigation purposes only.*

*D. The owner of all houses, buildings or properties used for human occupancy, employment, recreation, business or where people congregate, situated within the city and abutting any street, alley or right-of-way in which there is now located a public water system of the district within the city limits, is required to connect such facilities directly to the public water system in accordance with the provisions of this chapter, within sixty days after date of official notice to do so, provided that the public water is within two hundred feet of the property line.*

*E. When property is sold or change ownership, said property shall be required to connect to the public water system if available, or when it becomes available.*

*13.02.040 Developer connection fee/capacity charge payment.*

*C. Owners and/or developers of residential property that have applied for water connections for a capacity for greater than ten single-family residential units or greater than ten ERUs where such projects are to be constructed in phases over a period of time, must specifically request and receive approval for a time period or duration in excess of six months.*

*D. If approval is given for duration in excess of six months, then the owner or developer of such residential property shall be required to pay one quarter of the total connection fees and capacity charges for the entire development project. This twenty-five percent shall be non-refundable in the event that any such development or project is canceled, and this twenty-five percent shall also be considered as the connection fees and capacity charges for the last twenty-five percent of such costs for the development. Prior to actually connecting any single-family residential unit or other units for which the equivalent residential capacity has been requested, approved, and allocated, the connection fees and capacity charge must be paid in full.*

*13.02.050 Connection to the city's main.*

*A. After payment of all connection fees, capacity charges, service charges, and any other applicable fees and charges, and the execution of the agreement herein described, the public works director shall cause the premises described in the application, if the same abut upon a street in which there is a city water main, to be connected to the city's water main by a service pipe extending at right angles from the main to the property line except as herein provided. The city connection, which shall include a stopcock placed within the curb line and the meter set assembly in conformance to city specifications, shall be maintained by and kept within the exclusive control of the city.*

*B. Wherever it has been ascertained that a retaining wall, ornamental wall, or landscaped rockery, or any other form of permanent structure is to be or has been erected upon any portion of a city street or public place in which a water service connection has been installed, the public works director shall cause the relocation or readjustment of such water service connection or any portion thereof. The cost of such relocation or readjustment shall be charged against the property on which the erection of the permanent structure, as above referred to, is to be done or has been done and to the owner thereof. In no case shall the city be required to maintain or repair any portion of the service connection beyond the meter set assembly.*

*C. Where there is a water main in front of any premises the owner of such premises supplied by city water shall have his own separate service connection with the city main and the premises so supplied shall not supply water to any other premises. If two or more premises are supplied by one metered service, service charges for each premises supplied with water shall be assessed for each separate building or premises so supplied. Services existing as of the effective date of the ordinance codified in this chapter shall be separated at such time as the owner or occupant thereof shall obtain a building permit for the remodeling or structural alteration of such premises.*

*13.02.070 Water services meter location*

*All water service connections shall be made by, or under the control of the city. Meters shall be placed as follows:*

*A. Within the corporation limits of the city, meters shall be placed within two feet of the edge of the sidewalk or proposed sidewalk on the curb side in existing plats and within two feet of the sidewalk on the property side in new plats.*

*B. Within the county, meters shall be placed within the county right-of-way and within two feet of the property line nearest the customer's premises.*

*C. In instances other than contained herein, or where the public works director determines that unusual or conflicting conditions exist, the location of meters shall be determined by the public works director.*

*13.02.100 Service connection—Location of service pipe.*

*Water service pipe shall not be laid or maintained parallel with and within ten feet horizontally of any sanitary sewer, electrical conduit, gas pipe, or communications cable, septic tank, or drain field. When additional water pipe extensions or replacements are to be made beneath the surface of the ground within the premises and connected with existing water service pipes between the meter and the premises, an application therefor shall be made to the city for inspection and approval prior to backfilling the trenches.*

*13.02.110 Customer shut-off valve.*

*Shut-off valves of approved full flow pattern with key or hand wheel shall be installed in the water service pipe leading from the city meter to the building within the premises served in accordance with the applicable plumbing code. Shut-off valves, where buried, shall be properly enclosed in a minimum six-inch diameter pipe, or box of concrete, plastic, or iron with an approved cover, protected from freezing and readily accessible. Valves or customer owned equipment are not permitted to be installed within the city's meter box. No outlet shall be connected to the service extension pipe between the city meter and the customer shut-off valve.*

*13.02.410 Water main extension request.*

*When a person desires to extend a city water main, that person must make a written request to the city and state on that request the location where the extension is desired, the purpose for extension, and give details and extent of any development they are considering, as well as any other factors as may be pertinent. The public works director shall evaluate all requests for main extensions, taking into consideration the availability of water in the existing mains, reservoir capacity, pressures in the area, and other local conditions. If the proposal is acceptable, specific conditions and requirements will be determined by the public works director.*

*13.02.420 Water main extension design.*

*The proposed main extension shall be designed by a licensed engineer and be approved by the public works director and appropriate governmental authorities. The design shall be in conformance with city standards as contained in the engineering development code of the city, and shall be designed by the use of a hydraulic analysis, considering pipe size, restrictions, peak demand, length of run, elevation differences, and other factors that may be pertinent.*

*Chapter 13.05 CROSS-CONNECTIONS AND BACKFLOW PREVENTION*

*13.05.050 Installation requirements.*

*To ensure proper operation and accessibility of all backflow prevention assemblies the following requirements shall apply to the installation of these assemblies.*

*A. All plumbing code provisions must be complied with.*

*B. No part of the backflow prevention assembly shall be submerged in water or installed in a location subject to flooding. If installed in a vault or basement, adequate drainage shall be provided.*

*C. Assemblies must be installed at the point of deliver of the water supply, before any branch in the line, property located or private just inside of the property line. Alternate locations must be approved in writing by the city prior to installations.*

*D. The assembly must be protected from freezing and other severe weather conditions.*

*E. All backflow prevention assemblies to be installed shall be of a type and model pre-approved by the state of Washington, Department of Health;*

*F. Only assemblies specifically approved by the Washington State Department of Health for vertical installation may be installed vertically.*

*G. If written permission is granted to install the backflow assembly inside of the building, the assembly shall be readily accessible to city employees during regular working hours of eight a.m. to five p.m., Monday through Friday.*

*H. If an assembly, with written permission, is installed inside of the premises and is installed a minimum of five feet above the floor, it must be equipped with a rigidly and permanently installed scaffolding acceptable to the city. This installation must also meet the requirements set out by the U.S. Occupational Safety and Health Administration and the state of Washington Occupations Safety and Health Act.*

*I. Reduced pressure backflow assemblies may be installed in a vault only if relief valve discharge can be drained to daylight through a "boresight" type drain. The drain shall be of adequate capacity to carry the full rated flow of the assembly and shall be screened on both ends.*

*J. An approved air gap shall be located at the relief valve orifice. This air gap shall be at least twice the inside diameter of the incoming supply line as measured vertically above the top rim of the drain and in no case less than one inch.*

*K. Where a backflow assembly is deemed necessary, the model of assembly and installation plan shall be submitted to the city for approval prior to installation.*

*L. Upon completion of installation, the city shall be notified and all assemblies must be inspected and tested. All backflow assemblies must be registered with the city. Registration shall consist of the date of installation, make, model, serial number of the backflow assembly and initial test report.*

*M. Any customer, before water service is restored or installed, must fill out CC questionnaire (Questionnaire i.e. hot tub underground kidney form, machine extended faucets, etc.) (See Exhibit A)*

*N. The water purveyor shall inspect the premises and answer any questions the owner has about the questionnaire (Property Survey Form — See Exhibit A).*

*O. After the water purveyor has conducted the necessary inspections and answered owner questions, the water purveyor shall determine the degree of hazard and backflow apparatus to be installed.*

*P. The water purveyor shall give the owner of the premises an adequate amount of time to have the assembly installed (to be determined by director). The backflow assembly system shall be tested and inspected by a city official or, if installed, the assembly shall be removed and re-inspected by city.*

*Q. After the appropriate assembly has been installed, tested and approved, the assembly shall be tested annually thereafter on a date to be determined by the water purveyor.*

*R. The water purveyor shall maintain a master list of the properties and put the list to bid for testing purposes. City shall then supervise BAT during testing. All backflow devices shall be tested annually regardless of the status of service (inactive, active, etc.)*

*S. The city shall pay the bill to BAT and shall pass the cost of each service test fee on to the owner of the property. If said service test fee is not paid then the utility service shall be shut off.*

**FINDING:** The proposed development will be extending water service from Woodard Rd into the subdivision. Water service will be provided to each residential lot. This standard applies.

**CONDITION OF APPROVAL: Prior to Final Engineering approval, the engineering plans shall provide details regarding main line extensions and placement of all lateral lines for City review and approval.**

**CONDITION OF APPROVAL: All existing water main must be abandoned and services hooked up to new main.**

**CONDITION OF APPROVAL: Prior to construction, all water system materials and methods shall be reviewed by the City for compliance with applicable standards.**

**CONDITION OF APPROVAL: Prior to Final engineering approval, the engineering plans shall identify appropriate cross-connection control and backflow prevention devices for City review and approval.**

**CONDITION OF APPROVAL: Prior to construction, the installer of the backflow preventer shall obtain a plumbing permit.**

*13.08 Sewer Service System*

*13.08.020 Facilities installation.*

*The owner of any house, building or property used for human occupancy, employment, recreation or other purpose, situated inside the district and abutting any street, alley or right-of-way in which there is now located or may in the future be located a public sanitary sewer of the city, is required, at the owner's expense, to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this article, provided that such public sewer is within two hundred feet of the property line of the lot or parcel upon which such house, building or property is situated.*

*13.08.030 Director to cause connections.*

*The director shall have the power in all cases, where there is a public sewer in any street or alley, to cause any owner of land upon or adjoining such street or alley, his agent or tenant, to make a sufficient drain and proper sewer connection from any house, building or property upon such land whenever in the opinion of the director the same is necessary, and the officer shall thereupon give each owner, agent or tenant, or person occupying such premises not less than five days' notice in writing specifying the time when such drain or sewer connection must be completed, and if the owner, agent or tenant neglects to complete the same within the time specified, and in addition to penalties imposed for the violation of any of the provisions of this article, the director of the city shall cause it to be done and shall recover the whole amount of the expense thereof, together with ten percent additional as a penalty by an action in the name of the city before any court having jurisdiction thereof, from the owner or person occupying such premises, who shall be*

*severally and jointly liable therefor; and the same shall constitute a lien on the premises and may be foreclosed as provide by law.*

*13.08.070 Unpolluted discharges prohibited.*

*A. No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof run-off, subsurface drainage, cooling water or unpolluted industrial process water to any sanitary sewer.*

*B. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers or to a natural outlet approved by the city director. Industrial cooling water or unpolluted process water may be discharged upon approval of the city director to a storm sewer or natural outlet.*

*13.08.080 Prohibited discharge.*

*Except as provided in this article, no person shall discharge or cause to be discharged any of the following described water or wastes into any public sewer:*

*A. Any liquid or vapor having a temperature higher than one hundred fifty degrees Fahrenheit;*

*B. Any water or waste which may contain more than one hundred parts per million by weight of fat, grease or oil;*

*C. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas;*

*D. Any garbage that has not been properly shredded;*

*E. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works;*

*F. Any waters or wastes having a pH lower than 6.0 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works;*

*G. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with sewage treatment processes, constituting a hazard to humans or animals, or creating any hazard in receiving waters of the sewage treatment plant;*

*H. Any waters or wastes having a B.O.D. or containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant;*

*I. Any noxious or malodorous gas or substance capable of creating a public nuisance.*

*13.08.090 Restricted discharge.*

*The admission into the public sewers of any waters or wastes having: (1) a five-day biochemical oxygen demand greater than three hundred parts per million by weight, or (2) containing more than three hundred fifty parts per million by weight of suspended solids, or, (3) containing any quantity of substances having the characteristics described in subsection (c) of this section, or (4) having an average daily flow greater than two percent of the normal daily dry weather sewage flow as determined by the city, shall be subject to a review and approval of the city director. The owner shall provide, at its expense, such preliminary treatment as may be necessary to: (a) reduce the biochemical oxygen demand to less than three hundred parts per million and the suspended solids to less than three hundred fifty parts per million by weight, or (b) reduce objectionable*

*characteristics or constituents to within the maximum limits provided in this article, or (c) control the quantities and rates of discharge of such waters or wastes to comply with the limits established by the city. Plans, specifications and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the city and of any applicable state departments and no construction of such facilities shall be commenced until the approvals are obtained in writing.*

**FINDING:** The proposed development will be extending sanitary sewer service from Woodard Rd into the subdivision. Sewer service will be provided to each residential lot. A sewer pump station is identified as part of Phase 2 and will be evaluated as part of Phase 2 application process. These standards apply.

**CONDITION OF APPROVAL: Prior to engineering approval, sewer utility plan sheets and details meeting City standards shall be submitted for review and approval by the City.**

**CONDITION OF APPROVAL: Prior to construction, all sewer system materials and methods shall be reviewed by the City for compliance with applicable standards.**

*Chapter 13.30 Storm Water System*

*13.30.010 Storm water standards.*

*The city council adopts the Washington State Department of Ecology "Basic Storm Water Protection Standards" for use in the storm water management within the city of Napavine.*

*13.30.020 Use in development review.*

*The city council requires the use of the basic storm water protection standards for all building and development review of storm water drainage and authorizes the public works superintendent to attach storm water quantity and quality conditions to meet the basic storm water program standards.*

*13.30.030 Wellhead protection.*

*The city council adopts the wellhead management and drainage standards as required by the basic program.*

*13.30.040 Standards of practice.*

*The city council sets the city standard of performance for storm drainage as in all utilities as that of "best engineering practices" for all construction within city.*

**FINDING:** The proposed site plan included a Drainage & Erosion Control Report, demonstrating compliance with the 2019 Stormwater Management Manual of Western Washington. This standard applies.

**CONDITION OF APPROVAL: Prior to Final Engineering approval, a final stormwater plan and technical information report shall be submitted for review and approval by the City.**

**CONDITION OF APPROVAL: During construction, infiltration facilities shall be tested to verify design infiltration rate. All facilities shall demonstrate ground water separation given the environmentally sensitive areas, high water table, and Class 1 Critical Aquifer Recharge Areas mapped on site.**

**CONDITION OF APPROVAL: Prior to construction, erosion control devices shall be installed and shall remain in place until the soil has stabilized.**

*Chapter 13.34 Service Standards Levels—Use of Impact Fees*

*13.34.010 Review by city.*

*The city of Napavine shall review development to ensure that appropriate provisions are made for the public health, safety and general welfare through the adoption and review of development within the city by the use of its zoning and development regulations, subdivision ordinance and other ordinances as provided in the following sections.*

*13.34.020 Engineering required.*

*In the review of development proposals the city shall require an engineering analysis of water, sewers and city street systems and a twenty-five-year storm event drainage analysis of areas impacted by development proposals.*

*13.34.030 Concurrent improvements.*

*The city shall require on-site improvement according to city standards, as necessary to appropriately service the development and such improvement shall be accomplished concurrently with the development.*

**FINDING:** This standard applies.

**CONDITION OF APPROVAL: Prior to construction, a final stormwater plan shall be submitted for review and approval by the City. All final engineering for street improvements, as well as water and sanitary sewer connections shall be completed and approved prior to construction.**

*Title 14 CRITICAL AREAS*

*Chapter 14.10 - NAPAVINE CRITICAL AREAS ORDINANCE (NCAO)*

*14.10.020 Purpose.*

*The purpose of this chapter is to implement the open space policies of the Napavine Comprehensive Plan and the elements of the Washington State Growth Management Act.*

*Critical areas are valuable and potentially fragile natural resources that, in their natural state, provide many valuable social and ecological functions. The attendant buffers of critical areas are essential to the maintenance and protection of the functions and values of critical areas. The loss of social and ecological functions provided by critical areas, especially wetlands, riparian zones, and fish and wildlife habitat results in a detriment to public safety and welfare.*

*Critical areas help to relieve the burdens on the people of Napavine which urban development can create including congestion, noise and odors, air pollution, and water quality degradation.*

*Critical areas serve several important urban design functions. They provide: (1) open space corridors separating and defining developed areas within the city; (2) views and edges which enhance property values and quality of life in developed neighborhoods; (3) educational opportunities for the citizens of Napavine and (4) accessible areas for residents to stroll, hike, and enjoy Napavine's valuable natural features.*

*Conservation of critical areas has associated natural resource benefits, including improved air and water quality, maintenance of fish and wildlife habitat, decreased erosion and sedimentation to streams, absorption of pollutants and preservation of priority, threatened, or endangered plant and animal species.*

*The intent of this ordinance is for the City of Napavine (or administrator) to achieve no net loss of wetlands, floodplains, fish and wildlife habitat areas, and riparian zones and to avoid significant adverse impacts to geologically hazardous areas and aquifer recharge/wellhead protection areas.*

*The city's preferred strategy to achieve no net loss is to avoid adverse impacts to critical areas and buffers. However, the city recognizes that there are situations and circumstances where avoidance is not practicable whereupon the intent of this chapter is to minimize and mitigate the environmental impacts of development within and adjacent to critical areas and buffers.*

*This chapter is based upon two equally important principles: the protection of individual property rights, and the protection of critical areas consistent with state law throughout the urban area. This chapter attempts to promote a balance between private use of critical areas and the maintenance of the natural appearance and functional values inherent in critical areas.*

*Development limitations on critical areas reduce the need to require additional studies to ensure compliance with the State Environmental Policy Act (SEPA) process as well as other state and federal environmental regulations.*

**FINDING:** This standard applies.

*14.10.040 Applicability and critical areas map.*

A. *Applicability. The provisions of this chapter apply to lands within the Napavine corporate limits and urban growth area that are either designated as critical areas and their buffers on the city's official critical areas maps, or are critical areas and buffers which are identified as part of a project specific application and land use review.*

    1. *Properties containing critical areas are subject to this title.*

    2. *Buffers are protected and impacts to buffers are regulated to help improve the functional values of critical areas.*

    3. *When the requirements of this chapter are more stringent than those of other Napavine codes and regulations, the requirements of this chapter shall apply.*

    4. *Where a site contains two or more critical areas, the site shall meet the minimum standards and requirements for each identified critical area as set forth in this title.*

B. *Development Permit Required. The City of Napavine shall not grant any permit, license, or other development approval to alter the condition of any land, water, or vegetation, or to construct or to alter any structure or improvement, nor shall any person alter the condition of any land, water, or vegetation, or construct or alter any structure or improvement for any development proposal within a critical area or its buffer regulated by this chapter, except in compliance with the provisions of this chapter shall be considered a violation and subject to enforcement procedures.*

C. *State and Federal Agency Review. Compliance with the provisions of this chapter does not necessarily constitute compliance with other federal, state, and local regulations and permit*

*requirements that may be required (for example, Shoreline Permits, Hydraulic Project Approval (HPA) permits, Clean Water Act Section 404 permit(s) and 401 certification, Ecology Administrative Orders, or NPDES permits). Regulated activities are subject to review and comment as required through the SEPA and/or JARPA review process. The applicant is responsible for complying with these requirements, apart from the process established in this chapter.*

*D. Critical Areas. Critical areas include:*

*1. Wetlands;*

*2. Aquifer recharge areas;*

*3. Wellhead protection areas;*

*4. Fish and wildlife habitat conservation areas;*

*5. Frequently flooded areas;*

*6. Geologically hazardous areas; and*

*7. Slopes with gradient of thirty percent or greater.*

*E. Map Location. The general location of critical areas is depicted on the adopted Napavine critical areas map. The critical areas map is an indicator of probable regulated areas. The precise limits of critical areas and their attendant buffers on a particular parcel of land shall be determined by the applicant prior to approval of a development action on the subject property. Development shall avoid critical areas, and where avoidance is not practical, as determined by the administrator, development shall minimize adverse impacts to critical areas and buffers, consistent with the provisions of this chapter. To determine whether avoidance is practical, the administrator shall consider issues such as: the substantial evidence presented by the applicant demonstrating the avoidance measures the applicant considered; the quality of the critical resource and buffer functions and values to be impacted, avoidance of impacts to higher quality resources and buffers is preferred; the nature and extent of mitigation and enhancement measures proposed to compensate for the proposed impact; whether the impacts proposed are necessary to implement the city's capital facilities plan; and other factors determined relevant by the administrator. The administrator may also consider the financial implications of avoidance but shall not give private gain greater weight than resource management founded upon best available science. The community development department shall keep on permanent file and maintain the critical areas map.*

*F. Use of Existing Procedures and Laws. The following laws and procedures shall be used to implement this chapter:*

*1. Napavine Critical Areas Ordinance (NCAO).*

*2. The State Environmental Policy Act (SEPA), Chapter 43.21C RCW.*

*3. The Shoreline Management Act (SMA), Chapter 90.58 RCW.*

*G. Administration. When the administration determines a proposed development or activity is within, abutting, or is likely to adversely affect a critical area or buffer pursuant to the provisions of this chapter, the administrator shall:*

*1. Determine the likely presence of a critical area;*

2. *Determine the appropriate use as provided in this chapter and require project plans to incorporate appropriate setbacks or buffers to avoid critical areas and meet specific performance standards;*

3. *Determine appropriate development or mitigation measures or require the applicant to prepare a critical area assessment report;*

4. *Review and evaluate the proposal, the critical area report, and relative information and:*

    a. *Determine whether the development proposal conforms to the purposes and performance standards of the NCAO,*

    b. *Assess the potential impacts to the critical area and determine if they can be avoided or minimized,*

    c. *Determine whether mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of the NCAO; and*

    d. *Impose any required conditions to assure compliance with this chapter, including mitigation measures, implementation and monitoring.*

*H. Critical Area Assessment (CAR)—Authority and Use. When the administrator determines a proposed development is within, abutting, or is likely to adversely affect a critical are or buffer pursuant to the provisions of this chapter, the administrator shall have the authority to require a critical area report (CAR). A qualified professional shall prepare the report that includes a reasonable level of technical study and analysis to protect the public health, safety and welfare as well as critical area protection. The intent of these provisions is to require a reasonable level of technical study and analysis sufficient to protect critical areas. The analysis shall be commensurate with the value or sensitivity of a particular critical area and relative to the scale and potential impacts of the proposed activity.*

**FINDING:** This standard applies. Applicant has provided a Critical Areas Report (CAR), Phase 1 & 2 Conceptual Mitigation Plan, Phase 1 Conceptual Buffer Plan, Critical Areas Variance for Steep Slopes, Geotechnical Report, Letter from Geologist, Geotechnical Steep Slope Setback Memo, SEPA Checklist, SEPA response memo, and Phase 2 Environmental Site Assessment.

*14.10.050 Uses.*

*A. Approval Required. Unless the requirements of this chapter are met, Napavine shall not grant any approval or permission to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement regulated through the following: Building permit, commercial or residential, franchise right-of-way construction permit, site development permit, right-of-way permit, shoreline permits, or any subsequently adopted permit or required approval not expressly exempted by this chapter.*

*B. Other Law. Compliance with these regulations does not remove an applicant's obligation to comply with applicable provisions of any other federal, state, or local law or regulation.*

*C. Allowed Uses. The administrator may allow the following uses on critical areas and within buffer areas subject to the development standards of NCAO 14.10.100 and appropriate mitigation standards as described in NCAO 14.10.110:*

1. *Low impact recreational uses. The following uses are necessary for the understanding and enjoyment of critical areas.*

    a. *Outdoor recreational or educational activities which do not significantly affect the functions and values of the critical area and buffers (including wildlife management or viewing structures, outdoor scientific or interpretive facilities, and pervious trails for non-motorized use, and other similar uses) and meet the following criteria:*

        i. *Trails shall not exceed five feet in width and shall be made of gravel or pervious material.*

        ii. *The trail or facility is located in the outer fifty percent of a wetland or riparian buffer unless a location closer to the critical area is required for interpretive purposes.*

        iii. *The trail or facility is constructed and maintained in manner that minimizes disturbance of the wetland or buffer. Trails or facilities within wetlands shall be placed on an elevated structure as an alternative to fill.*

    b. *Harvesting wild crops which do not significantly affect the function of the wetland or regulated buffer (does not include tilling of soil or alteration of wetland area).*

2. *Utilities. Below or above ground utilities, facilities and improvements, where necessary to serve development consistent with the Napavine comprehensive plan and development code, including: streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, open space, and parks and recreational facilities, where there is no other reasonable alternative, based on topographic and environmental conditions as determined by the administrator.*

3. *Removal of diseased or dangerous trees, as determined by the administrator or the removal of invasive or nuisance plants.*

4. *Specific Uses Allowed in Wetlands.*

    a. *Enhanced Replacement. Replacing or enhancing a wetland such that the enhanced wetland is of higher quality and meets the criteria for a higher category.*

    b. *Wetland Banking. Construction, enhancement or restoration of wetlands to use as mitigation for future wetland development impacts in the same watershed is permitted if:*

        i. *A critical area permit shall be obtained prior to any mitigation banking. Federal and state wetland regulations, if applicable, shall supersede city requirements.*

        ii. *All impacts to wetlands and wetland buffers shall be mitigated and monitored consistent with NCAO 14.10.120(E).*

D. *Limited Uses. Limited uses, as described in this section, shall avoid critical areas, to the greatest extent reasonable and practicable. Limited uses may be allowed within critical area buffers subject to the mitigation measures and implementation of a monitoring plan as described in NCAO 14.10.120. Applications for development within critical areas or buffers shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas and buffers. All limited uses shall be consistent with the provisions of this chapter and shall be subject to SEPA review.*

1. *Development Subject to Site Plan Review. Any new building or structure affecting critical areas or buffers shall be subject to site plan review, unless otherwise exempted in this chapter.*

2. *Storm Water Facilities. Storm water facilities may be allowed in buffers in wetlands with low habitat function (less that twenty points on the habitat section of the rating system form); provided, the facilities shall be built on the outer fifty percent of the buffer and not degrade the existing buffer function and are designed to blend with the natural landscape. Unless determined otherwise by the administrator.*

E. *Use intensity. The intensity of the land use proposed has a direct relationship to the potential severity of impacts to critical areas and buffers. Generally, most land uses allowed in an urban zoning district are high impact uses.*

**FINDING:** This standard applies. Applicant has provided a Critical Areas Report (CAR), Phase 1 & 2 Conceptual Mitigation Plan, Phase 1 Conceptual Buffer Plan, Critical Areas Variance for Steep Slopes, Geotechnical Report, Letter from Geologist, Geotechnical Steep Slope Setback Memo, SEPA Checklist, SEPA response memo, and Phase 2 Environmental Site Assessment.

*14.10.060 Variances.*

A. *An applicant who seeks to vary from requirements of this chapter may seek a variance pursuant to this section. The city council shall review a request to vary from requirements of this chapter through a review process. The administrator may elect to seek guidance from and may rely upon state agency expertise at the applicant's expense.*

B. *Approval Criteria. An application to vary from the requirements of this chapter shall demonstrate compliance with all the following criteria:*

1. *There are special circumstances applicable to the subject property or to the intended use such as shape, topography, location or surroundings that do not apply generally to other properties;*

2. *The variance is necessary for the preservation and enjoyment of substantial property right or use possessed by other similarly situated property, but which because of special circumstances is denied to the property in question;*

3. *Granting the variance will not be materially detrimental to the public welfare or injurious to the property of improvement;*

4. *Granting the variance will not violate, abrogate, or ignore the goals, objectives, or policies of the Napavine comprehensive plan;*

5. *In addition to the approval criteria above, an application to vary from the buffer requirements of fish and wildlife habitat conservation area or wetland buffer shall demonstrate that the requested buffer width modification preserves adequate vegetation to: maintain proper water temperature; minimize sedimentation; and provide food and cover for critical fish and wildlife species;*

6. *When granting a variance, the administrator may attach specific conditions to the variance that will serve to meet the goals, objectives, and policies of this chapter, including the preparation and implementation of a mitigation and monitoring plan consistent with NCAO 14.10.120.*

**FINDING:** This standard applies. Applicant has submitted Geotechnical studies that demonstrate that a reduced steep slope setbacks of 25 feet – from the standard setback of 50 feet – from top of slope. See conditions under Geographic Hazards & Steep Slope section.

**FINDING:** Applicant has submitted Wetland and Habitat mitigation plan as well as Buffer plan. See conditions under Wetlands and Habitat sections.

*14.10.090 Best Available Science.*

*Critical area reports and decisions to alter critical areas shall rely on the Best Available Science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat. Best Available Science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific professional or team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925.*

**FINDING:** This Standard Applies.

*14.10.100 Development standards.*

*A. Authorization Required. Within critical areas, the administrator shall prohibit soil excavation, grading, removal of native vegetation species, draining, intentional burning, planting of invasive or nuisance vegetation, placement of structures and new construction on critical areas unless otherwise authorized in this chapter.*

*1. These development standards apply to uses on all critical areas and within buffers unless otherwise exempted in this title.*

**FINDING:** This standard Applies. Applicant has submitted critical area, mitigation, and buffer studies. No buildable lots are being proposed within critical areas, including steep slopes.

**CONDITION OF APPROVAL: Final Engineering Plans shall show for each lot: location within the plat, dimensions of all four sides, and building envelope demonstrating that no lot is being created within a critical area, unless granted by the City. Plans will be reviewed by City prior to final approval.**

**CONDITION OF APPROVAL: No construction, including excavation and landscaping, will occur within critical areas, unless granted by the City.**

*14.10.110 Mitigation.*

*A. Approval. Administrator approval of a mitigation plan is prerequisite for approval of any development activity on critical areas.*

**FINDING:** This standard applies. Applicant has provided a Critical Areas Report (CAR), Phase 1 & 2 Conceptual Mitigation Plan, Phase 1 Conceptual Buffer Plan, Critical Areas Variance for Steep Slopes, Geotechnical Report, Letter from Geologist, Geotechnical Steep Slope Setback Memo, SEPA Checklist, SEPA response memo, and Phase 2 Environmental Site Assessment.

*14.10.120 Critical lands*

*A. Critical Aquifer Recharge Areas.*

1. *Applicability. Due to the exceptional susceptibility and/or vulnerability of ground waters underlying aquifer recharge areas to contamination and the importance of such ground waters as sources of public water supply, it is the intent of this chapter to safeguard ground water resources by mitigating or precluding future discharges of contaminants from new land use activities. The provisions of this chapter shall apply to regulated activities specified herein within those portions of the Napavine UGA.*

2. *Designation. Lands within the Napavine UGA meeting the classification criteria for aquifer recharge areas are hereby officially designated, pursuant to the mandate of RCW 36.70A.060 and 36.70A.170 as critical aquifer recharge areas.*

3. *Aquifer Recharge Areas—Rating System Determinations. In cases of disputed soil series, or series boundary and resulting aquifer recharge category, the administrator shall use all available information including reports by the United States Geological Survey and technical assessments submitted in accordance with this chapter to make the final determination. This may include consultation with USDA Natural Resource Conservation Service, the Washington Department of Natural Resources Division of Geology and Earth Resources or a soil scientist certified by the American Registry of Certified Professionals in agronomy, crops and soils. In areas that have been disturbed or the surface soil removed as in gravel pits, the administrator shall determine the most appropriate category with geological and hydrological information.*

4. *Demonstration of No Adverse Impact. The applicant shall demonstrate, through the land use approval process, that the proposed activity will not have any adverse impacts on ground water in critical aquifer recharge areas, based on the Safe Drinking Water Act and the Wellhead Protection Area Program, pursuant to Public Water Supplies, Chapter 246-290 WAC; Water Quality Standards for Ground Waters of the State of Washington, Chapter 173-200 WAC; and Dangerous Waste Regulations, Chapter 173-303 WAC. By this reference, Chapters 173-200, 173-303, and 246-290 WAC, as written and hereafter updated will be part of this chapter.*

5. *Mitigation Conditions. The administrator may impose any reasonable condition necessary to ensure that the specific use or activity will not significantly degrade ground water quality. Such conditions may include, but are not limited to the following:*

    a. *A written management plan for waste water, hazardous products and hazardous waste, petroleum products and petroleum waste and other materials judged by the administrator to be detrimental to ground water quality, that when implemented using best management practices, will prevent ground water contamination;*

    b. *Upgrading available on-site spill response equipment;*

    c. *Employee spill response training;*

    d. *Emergency service coordination measures; and*

    e. *Ground water monitoring.*

**FINDING:** This standard applies. Approximately 60% of Phase 1 has a Critical Aquifer Recharge Areas (CARA) Category 1 overlay. The applicant has provided a drainage & erosion control Technical Information Report (TIR). See Stormwater section for conditions.

*B. Fish and Wildlife Habitat Conservation Areas.*

1. *Fish & Wildlife Areas. Identified sensitive fish and wildlife habitat areas shall be preserved or adverse impacts mitigated. Protected fish and wildlife habitat conservation areas include Washington State Department of Fish and Wildlife's designated Priority Habitat and Species and Department of Natural Resources jurisdictional waters found within the City of Napavine as defined below:*

| ***Table 14.10.120.B(1)*** | |
|---|---|
| ***Classifications WAC 365-190-130*** | ***Description*** |
| ***(1) Areas with which state designated endangered, threatened, or sensitive species have a primary association. Example: Newaukum River.*** | ***Areas which, if significantly altered, may reduce the likelihood that the species will reproduce over the long term. Habitats associated with these species are protected and considered by the Washington Department of Fish and Wildlife as Priority Habitats and Species, (WDFW PHS on the Web Application). Species and habitats identified or mapped within 300 feet of a project site are designated as jurisdictional critical areas.*** |
| ***(2) Species and habitats of local importance.*** | ***Habitat: Unique or significant habitats which regionally rare wildlife species depend upon and that have high wildlife concentrations, including but not limited to:<br>Caves,<br>Talus slopes,<br>Snag rich areas (outside forest practices),<br>Oregon White Oak Woodlands,<br>Freshwater Wetlands.<br>Species: Wildlife species which require protective measures for their continued existence due to their population status or sensitivity to habitat alterations or are highly valued by the local citizens. Species meeting the above criteria but not depending upon a habitat of local importance (as listed above) to meet criteria habitat needs are those documented, verified, and mapped in the City of Napavine (WDFW PHS on the Web Application).*** |
| ***[(3) Reserved.]*** | |
| ***(4) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat.*** | ***Naturally occurring ponds with a surface area of less than twenty acres but greater than one acre. Naturally occurring ponds do not include ponds deliberately created from dry sites such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds (of less than three years' duration), and landscape amenities. However, naturally occurring ponds may include those artificial ponds intentionally created from dry*** |

| *Table 14.10.120.B(1)* | |
|---|---|
| ***Classifications WAC 365-190-130*** | ***Description*** |
| | ***areas in order to mitigate conversion of ponds, if permitted by a regulatory authority.*** |
| ***(5) Waters of the state.*** | ***Waters of the state shall be those defined in WAC 222-16-030, Forest Practices Board, Definitions, with the following revisions (Mapped by the Department of Natural Resources Forest Practices Application Mapping Tool):***<br>***(a) "Type S water" means all waters as inventoried as "shorelines of the state" under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW including periodically inundated areas of their associated wetlands.***<br>***(b) "Type F water" means segments of natural waters which are not classified as Type S water and have fish, wildlife, or human use. These are segments of natural water and periodically inundated areas of their associated wetlands.***<br>***(c) "Type Np water" means all segments of natural waters within defined channels that are perennial non-fish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type Np waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.***<br>***(d) "Type Ns water" means all segments of natural waters within defined channels that are not Type S, F, or Np waters. These are seasonal, non-fish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np water. Ns waters must be physically connected by an aboveground channel system to Type S, F, or N waters.*** |
| ***(6) Lakes, ponds, streams, and rivers planted with game fish by a governmental agency or tribal entity.*** | ***The Newaukum River is planted with game fish by governmental agencies (in a program associated with Newaukum High School students).*** |
| ***(7) State natural area preserves and natural resource conservation areas.*** | ***Currently, there are no natural resource conservation areas within the City of Napavine.*** |
| ***(8) Unintentionally created ponds.*** | ***Ponds with a surface area of less than 20 acres, but greater than one acre. This designation*** |

| *Table 14.10.120.B(1)* | |
|---|---|
| ***Classifications WAC 365-190-130*** | ***Description*** |
| | ***does not include ponds in which existing and ongoing operations are occurring for mining or other permitted activity.*** |

2. *Critical Areas Report. A critical area report (CAR) is required where specifically indicated and when an activity is proposed within a fish and wildlife conservation area or buffer that is not specifically exempt or permitted with review. A CAR should be consistent with the following standards:*

    a. *The CAR must be completed by a qualified professional who shall use scientifically valid and professionally recognized and accepted methods and studies or best available science in the analysis of critical area data and field reconnaissance and reference the source of science used. The CAR shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this chapter.*

    b. *Minimum CAR contents. At a minimum the report shall contain the following:*

        i. *The name and contact information of the applicant, the names and address of the qualified professional who prepared the report, a description of the proposal and identification of the permit requested;*

        ii. *A copy of the site plan for the development proposal showing;*

        iii. *Identified critical areas, buffers and development proposal with dimensions;*

        iv. *Limits of any areas to be cleared;*

        v. *A description of the proposed storm water management plan for the development and consideration of impacts to drainage alterations;*

        vi. *General location and types of vegetation;*

        vii. *The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;*

        viii. *Identification and characterization of all critical areas, wetlands, water bodies and buffers adjacent to the proposed project area;*

        ix. *A statement specifying the accuracy of the report and all assumptions made and relied upon;*

        x. *A description of reasonable efforts made to apply mitigation sequencing pursuant to mitigation sequencing, NCAO 14.10.120.B(13), to avoid, minimize and mitigate impacts to critical areas;*

        xi. *Plans for adequate mitigation as needed to offset any impacts in accordance with mitigation plan requirements, NCAO 14.10.120.B(13), including but not limited to:*

            A. *The impacts of any proposed development within or adjacent to a critical area of buffer on the critical area;*

            B. *The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;*

C. *A discussion of the performance standards applicable to the critical area and proposed activity;*

D. *Financial guarantees to ensure compliance; and*

E. *Any additional information required for the critical area as specified in the corresponding chapter.*

c. *Unless otherwise provided, a CAR may be supplemented by or composed in whole or in part of any reports of studies required by other laws and regulations or previously prepared, by a qualified professional for and applicable to the development proposal site as approved by the administrator.*

d. *The administrator may waive specific requirements of the critical area reports where less information is required to adequately address the impacts to the critical area or where existing information is on file with the city that addresses the impacts.*

e. *The administrator may require additional information that is necessary to determine compliance with the standards of this chapter.*

f. *A qualified professional shall be a person who has the education, training, experience and/or certification that meets the specific requirements to evaluate fish and wildlife habitat.*

3. *Best Available Science. Habitat reports and decisions to alter habitat areas shall rely on the Best Available Science to protect the functions and values of critical habitat areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat.*

4. *Habitat Buffers. Habitat conservation areas and buffers are assigned to the lands and regulated by this section according to Tables 14.10.120.B.1. Development activities are restricted within riparian buffer areas as indicated in Tables 14.10.0120.B.5.*

5. *Stream Types. Water types are defined and mapped based on WAC 222-16-030 or 222-16-031, whichever is in effect on the date of application. While the WAC definitions control generally, Type S streams include shorelines of the state and have flows averaging twenty or more cubic feet per second; Type F streams are those that are non-Type S but still provide fish habitat; and Type N streams do not have fish habitat and are either perennial or seasonal. Erosion gullies or rills, and streams which are man-made, or streams less than six inches wide or not having a defined bed and/or bank are not included.*

6. *Riparian Area Ecosystem Buffers.*

a. *Functionally Isolated Buffer Areas. Areas which are functionally separated from a stream and do not protect the stream from adverse impacts due to pre-existing roads, structures or vertical separation shall be excluded from buffers otherwise required by this chapter.*

b. *Buffers Generally. Regulated activities proposed along rivers and streams shall provide for habitat protection.*

i. *The riparian ecosystem buffer is generally an area of no building consisting of undisturbed natural vegetation. The buffer shall be required along all streams as classified by the DNR water typing classification system (WAC 222-16-030). The*

*buffer shall extend landward from the ordinary high-water mark of the water body.*

*ii. The buffer of a river or stream shall not extend landward beyond an existing substantial improvement such as an improved road, dike, levee, or a permanent structure which reduces the impact proposed activities would have on the river or stream.*

*c. Marking of the Buffer Area. The edge of the buffer area shall be clearly staked, flagged and fenced prior to and through completion of the construction. The buffer boundary markers shall be clearly visible, durable and permanently affixed to the ground.*

*d. Fencing from Farm Animals. Permanent fencing shall be required from the buffer when farm animals are introduced on a site.*

*e. Riparian base buffers are enumerated below in Table 14.10.120.B(6):*

| ***Table 14.10.120.B(6)<br>Riparian Area Buffers*** | |
|---|---|
| ***Riparian Areas*** | ***Riparian Ecosystem Area Buffer (in feet)*** |
| ***Type S (fish bearing)*** | ***See SMP<br>(The SMP outlines the jurisdictional habitat area associated with Type S Waters-Newaukum River)*** |
| ***Type F (fish bearing)*** | ***100*** |
| ***Type Np streams (perennial non fish bearing)*** | ***50*** |
| ***Type Ns stream (seasonal non fish bearing)*** | ***25*** |

*7. Riparian Buffer. Development or clearing activity may occur in the riparian buffer, provided that mitigation is conducted that results in no net loss of riparian habitat functions on the site, and further, that functionally significant habitat, defined as habitat that cannot be replaced or restored within twenty years, shall be preserved unless the clearing or development activity cannot feasibly be located on the site outside of the riparian buffer. An example of habitat that cannot be replaced within twenty years would be a stand of mature trees.*

*8. Isolated Riparian Habitat Areas. When impervious surfaces from previous development (roads, permanent buildings etc.) or flood control structures, such as levees, completely functionally isolate the riparian area from the watercourse, the riparian buffer shall extend from the ordinary high-water mark to the impervious surfaces, or toe of the flood control structure. If the watercourse is not completely physically isolated, but is completely functionally isolated, the Director may adjust the RHA to reflect site conditions and best available science.*

*9. Buffer Width Averaging. The community development director or designee may allow buffer width averaging in accordance with an approved critical area report on a case-by-case basis. Buffer width averaging shall not be used in combination with buffer width reduction or a minor exception on the same buffer segment to reduce the minimum buffer width below that specified in this chapter. Averaging of buffer widths may only be allowed where a qualified ecologist or biologist demonstrates that:*

a. *Such averaging will not reduce functions or functional performance; and*

b. *The fish and wildlife habitat conservation area varies in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; and*

c. *The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and*

d. *The buffer width is reduced by no more than fifty percent of the standard width and at no point to less than twenty-five feet.*

10. *Buffer Width Reduction. The community development director or designee may authorize the reduction of required buffer widths to a lesser width provided that an applicant demonstrates compliance with the following:*

    a. *Written evidence prepared by a qualified ecologist or biologist addressing the proposed buffer width reduction and demonstrating how the reduced buffer will enhance the functions and values of the fish and wildlife habitat conservation area.*

    b. *The buffer width is reduced by no more than fifty percent of the standard width and at no point to less than twenty-five feet.*

    c. *The remaining buffer area shall be planted with a mixture of native vegetation pursuant to an approved landscape plan prepared by a qualified ecologist or biologist certifying that the plantings to be used in the remaining buffer area will compliment and support the functions and values of the fish and wildlife habitat conservation area.*

    d. *The remaining buffer area shall be managed by the applicant or applicant's successor in interest for a minimum of three years following the administrator's final acceptance of any portion or phase of the project. A detailed management plan prepared by a qualified ecologist or biologist shall be submitted for review and approval prior to the administrator's authorization of any on-site construction, unless otherwise authorized by the community development director or designee. The detailed management plan shall address among other things the replanting of dead or dying plant material, the contents and submittal to the city of annual monitoring report prepared by a qualified ecologist or biologist with the cost of this report to be borne entirely by the applicant or applicant's successor in interest and methods to address any identified problems with the buffer's support of the functional value of the fish and wildlife habitat conservation area.*

    e. *Buffer width reduction shall not be used in combination with buffer width averaging on the same buffer segment.*

    f. *Where multiple resources exist on a property or site, the community development director or designee may authorize the use of buffer width averaging and buffer width reduction on different resources on the property or site provided that any required scientific analysis or reporting addresses and supports the separate use.*

11. *Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, buffers for fish and wildlife habitat conservation areas shall be maintained according to the approved critical area permit.*

12. *Buffer Uses. The following uses may be permitted within a buffer for a fish and wildlife habitat conservation area in accordance with the review procedures of this chapter; provided, they are not prohibited by any other applicable law or regulation and they are conducted in a manner so as to minimize impacts to the buffer and the fish and wildlife conservation area:*

    a. *Activities allowed under the same terms and conditions as in the associated fish and wildlife habitat conservation areas.*

    b. *Enhancement and restoration activities aimed at protecting the soil, water, vegetation or wildlife.*

    c. *Passive recreation facilities including trails and wildlife viewing structures, provided that the trails and structures are constructed with a surface that does not interfere with hydrology. Trails and paths will be five feet or narrower and constructed using natural, wood-based, or vegetated pervious surfacing.*

    d. *Stormwater management facilities limited to detention facilities, constructed wetlands, stormwater dispersion swales, may be constructed in accordance with an approved critical area report.*

13. *Mitigation.*

    a. *Approval. Administrator approval of a mitigation plan is a prerequisite for approval of any development activities within a designated habitat area or habitat buffer.*

    b. *Application. The applicant shall submit a written application describing the extent and nature of the proposed development activity on critical areas and buffers. The application shall include boundary locations of all critical areas and associated buffers.*

        i. *The application for development shall include a critical areas report that clearly identifies boundary locations of all critical areas and associated buffers and a mitigation plan prepared in compliance with this section.*

        ii. *The administrator may require the applicant to prepare special reports evaluating potential adverse impacts upon critical areas and potential mitigation measures as part of the land use application process. These reports may include but are not limited to the following: Storm Water Management Plan, Hydrology, Geology, Soils Report, Grading and Erosion Control Plan, Native Vegetation Report, Fish and Wildlife Assessment and Impact Report, Water Quality Report, Wetlands Delineation and other reports determined necessary by the administrator.*

    c. *The administrator may consult with state and federal resource management agencies and in order to protect wildlife habitat or natural resource values, shall attach such conditions as may be necessary to effectively mitigate identified adverse impacts of the proposed development activity.*

    d. *The administrator may request third party "peer review" of an application by qualified professionals and may incorporate recommendations from such third-party reports in findings approving or denying the application.*

    e. *All reports proposing mitigation (not including the purchase of mitigation bank credits) shall include provisions for annual monitoring and performance standards for a period of three years minimum, five years being standard, and ten years when the replacement of forested habitat is required or as approved by the administrator for*

*projects with minimal impacts. For example, temporary impacts to herbaceous cover that require reseeding grasses.*

*f. The administrator may require replacement mitigation to be established and functional concurrent with project construction.*

*14. No Net Loss.*

*a. Mitigation efforts, when allowed, shall ensure that development activity does not yield a net loss of the area or function, including fish and wildlife habitat values of the critical area. The Administrator's preferred approach to mitigating impacts is mitigation sequencing. (See section NCAO 14.10.030) No net loss shall be measured by:*

*i. Avoidance or mitigation of adverse impacts to fish and wildlife; or*

*ii. Avoidance or mitigation of net loss of habitat functions necessary to sustain fish life; or*

*iii. Avoidance or mitigation of loss of area by habitat type.*

*b. Mitigation to achieve no-net-loss should benefit those organisms being impacted.*

*c. Where development results in a loss of habitat area, the mitigation plan shall demonstrate that habitat area is replaced at an equal or greater functional value(s).*

*i. Wherever possible replacement or enhancement shall occur on-site.*

*ii. However, where the applicant can demonstrate that off-site mitigation will provide greater functional values, the administrator may approve such off- site mitigation.*

*15. Standard Requirements. All applications requiring review under this section shall have the following minimum conditions applied:*

*a. Marking Buffer During Construction. The location of the outer extent of the habitat buffer or if no buffer is required the habitat area shall be marked in the field and such markings shall be maintained throughout the duration of the permit.*

*b. Permanent Marking of Buffer Area. A permanent and perpetual physical demarcation along the upland boundary of the habitat buffer area shall be installed and thereafter maintained. Such demarcation may consist of logs, a tree or hedgerow, wood or wood like fencing, or other prominent physical marking approved by the Administrator. In addition, signs measuring (minimum size 1 foot × 1 foot and posted 3.5 feet above grade) shall be posted at an interval of one per lot or every one hundred feet, whichever is less, and perpetually maintained at locations along the outer perimeter of the habitat buffer approved by the administrator worded substantially as follows:*

***"Protected Habitat Area***
***Do Not Disturb***
***Contact The City of Napavine***
***Regarding Uses, Restrictions,***
***and Opportunities for Stewardship."***

*c. A conservation covenant shall be recorded in a form approved by the city attorney as adequate to incorporate the other restrictions of this section and to give notice of the*

*requirement to obtain a permit prior to engaging in regulated activities within a habitat area or its buffer.*

**FINDING:** This standard applies.

**FINDING:** The Applicant provided a Critical Areas Report (CAR) conducted by Habitat Technologies. Two streams were identified on-site. Stream 1 (R3UB) is classified as Type F, meaning it has the potential to provide direct fish habitat. The required buffer is 100 feet. According to the CAR, this buffer is completely encapsulated within the standard buffer for the associated Wetland A.

Stream 2 (R4UB) is classified as Type Ns, identified to originate within Wetland N in the northeastern portion of the project site. This stream does not appear to provide direct fish habitats, according to the CAR. The standard buffer would be 25 feet, being fully encapsulated within the standard buffer for the associated Wetland N.

**FINDING:** According to the CAR: "documentation within the onsite assessments for the project site was not identified to provide critical habitats for federally or stated listed endangered, threatened, or sensitive species; was not identified to provide "priority habitats" for stated listed endangered, threatened, candidate, or sensitive species; was not identified to exhibit naturally occurring ponds less than 20 acres in size; was not identified to exhibit aquatic habitats planted with game fish; was not identified to provide habitats for species of local importance as defined by the City of Napavine; and was not identified to include state natural area preserves of natural resource conservation areas."

Onsite assessment did identify that Wetlands A, N, D, and Z; along with Streams 1 and 2 would be defined as "Waters of the State." As such, these wetlands and streams would also be identified as City of Napavine "fish and wildlife conservation areas."

**FINDING:** The conceptual site plan denotes the critical areas and associated buffers. Site plan was updated post-SEPA comment period to respond to agency comments. Washington State Department of Fish and Wildlife conducted an onsite visit to verify findings of the CAR and support the 100 foot buffer for the Type F stream and 50 foot buffer for the Type N streams.

**CONDITION OF APPROVAL: Habitat buffer areas shall be marked prior to construction and permanently complying with NMC 14.10.120.**

**CONDITION OF APPROVAL: Final Engineering Plans shall show for each lot: location within the plat, dimensions of all four sides, and building envelope demonstrating that no lot is being created within a critical area, unless granted by the City. Plans will be reviewed by City prior to final approval.**

**CONDITION OF APPROVAL: No construction, including excavation and landscaping, will occur within critical areas, unless granted by the City.**

*D. Geologically Hazardous Areas, Erosion Hazards and Steep Slopes*

*1. Classification.*

*a. Steep Slopes.*

*i. Steep slopes are lands with slope of thirty percent or greater.*

*ii. Slope gradient shall be measured in two-foot contours in ten-foot intervals.*

*iii. Slopes greater than fifteen percent and less than thirty percent are generally considered buildable; however if the administrator in reliance upon evidence in the record or upon knowledge within the community, that a similarly situated slope between fifteen percent and thirty percent has previously exhibited movement or substantial instability, the administrator may find that the subject slope is a steep slope, for purposes of land use review and may require an applicant to provide substantial evidence, prepared by a qualified professional, a geotechnical or geological engineer, that the slopes within the proposed development area are stable and capable of safely supporting the proposed development.*

*b. Erosion hazard areas include severe and moderate erosion hazard areas.*

*i. Severe erosion hazard areas are those areas that have severe or very severe erosion potential as detailed in the soil descriptions contained in the Soil Survey of Lewis County Area, Washington, 1987, Soil Conservation Service, USDA.*

*ii. Moderate erosion hazard areas are those areas that have moderate erosion potential as detailed in the soil descriptions contained in the Soil Survey of Lewis County Area, Washington, 1987, Soil Conservation Service, USDA.*

*c. Landslide hazard areas are those areas meeting any of the following criteria:*

*i. Areas with evidence of failure, such as areas designated as quaternary slumps, earth flows, mudflows or landslides including those areas shown on maps published by the United States Geological Survey or Department of Natural Resources Division of Geology and Earth Resources, areas that show evidence of historical failure or instability, including, but not limited to, back-rotated benches on slopes; areas with structures that exhibit structural damage such as settling and racking of building foundations; areas that have toppling, leaning or bowed trees caused by ground surface movement and areas that show past sloughing or calving of bluff sediments resulting in a vertical or steep bluff face with little or no vegetation;*

*ii. Areas that are rated as unstable due to characteristics of the earth material and topography including slopes exceeding thirty percent with a vertical relief of ten or more feet, except areas composed of competent rock or constructed slopes designed and approved by a geotechnical engineer licensed in the state of Washington and experienced with the site or engineered slopes that show stable physical characteristics based on analysis by a qualified professional;*

*iii. Any area with all the following:*

*A. A slope greater than fifteen percent;*

*B. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and*

*C. Springs or ground water seepage.*

*iv. Slopes that are parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems and fault planes) in subsurface materials;*

*v. Slopes having gradients greater than eighty percent subject to rock fall during seismic shaking;*

vi. *Areas potentially unstable as a result of rapid stream incision and stream bank erosion or undercutting. These include slopes exceeding ten feet in height adjacent to streams and lakes and with more than thirty-five percent gradient;*

vii. *Areas located in a canyon, on an alluvial fan or presently or potentially subject to inundation by debris flows or catastrophic flooding;*

viii. *Areas included in the Slope Stability Study of the Centralia-Chehalis Area, Lewis County, Washington by Allen J. Fiksdal, Department of Natural Resources, Division of Geology and Earth Resources, 1978: Areas mapped as "unstable," "landslides" and "old landslides" (if slopes are in excess of thirty percent); and*

ix. *Areas located outside the study area on the Slope Stability Study of the Centralia-Chehalis Area, regardless of slope, that are mapped as "landslide debris" by the Washington State Department of Natural Resources, Division of Geology and Earth Resources.*

2. *Designation of Erosion and Landslide Hazard Areas. Lands of Lewis County meeting the classification criteria for erosion and landslide hazard areas are hereby, under Chapter 36.70A RCW, designated as erosion and landslide hazard areas, respectively.*

3. *Applicability.*

   a. *The provisions of this section shall apply to any development activity within areas classified as steep slopes, erosion hazard areas or landslide hazard areas. Development on lands classified as steep slopes, erosion hazards or landslide hazards is prohibited; provided that the Administrator may allow development on said lands only in strict conformance with the provisions of section NCAO 14.10.120.D.*

   b. *Development, design, implementation and mitigation measures concerning steep slopes, erosion hazard areas and landslide hazard areas shall be prepared by a qualified professional, a geotechnical engineer, licensed in the State of Washington, and said measures shall provide construction methodologies and quality assurances that the site can be developed without significant risk to public health, safety of welfare and in conformance with the development standards enumerated in sections NCAO 14.10.120.D.5 & 6.*

4. *Maps and Inventory. The approximate location and extent of hazardous areas are shown on the city's critical area maps. The city shall update the maps as new hazard areas are identified and as new information becomes available. The maps and reports cited should be used only as a general guide for landslide hazard investigation. Maintenance of maps does not imply that land outside mapped geologically hazardous areas will be without risk. Preparation and maintenance of such maps shall not create liability on the part of the City of Napavine, or any officer or employee thereof, for any damages that result from reliance on said maps or any decision lawfully made hereunder.*

5. *Development Standards for Erosion Hazard Areas. Uses and activities shall conform to the following standards:*

   a. *Severe erosion hazard areas, including all slopes in excess of thirty percent shall be protected to provide multiple benefits including reduction of erosion, reduction of sedimentation in water bodies and preservation of related ecological values. Modification of topography and vegetation shall be strictly limited.*

i. *Subdivision within erosion hazard areas shall be designed to fully avoid disturbance and removal of soil or vegetation within the severe erosion hazard area.*

ii. *Land that is located partially or wholly within a severe erosion hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of the severe erosion hazard area with provision for drainage, erosion control and related features that will not adversely affect the hazard area.*

b. *Moderate erosion hazard areas, not including land classified as a steep slope, shall be protected through provisions adequate to limit erosion and sedimentation during construction and use.*

c. *An erosion control plan for a severe and moderate erosion hazard area shall incorporate the following and shall be coordinated with requirements under other city or county codes and state National Pollutant Elimination System permits and other agency requirements:*

i. *Alteration of topography and disturbance and removal of vegetation shall be minimized to the maximum extent feasible by location on the least sensitive portion of the site. In a land division or multi-unit development, structures shall be clustered.*

ii. *To conform to existing topography of the site reduce topographic modification, foundations shall conform to the natural contours of the slope and be stepped/tiered where possible.*

iii. *Roads, driveways, other vehicular access, trails, walkways and parking areas shall be located in the least sensitive area of the site and designed with low gradients and/or parallel to the natural contours of the site. Retaining walls shall be preferred over cut and fill slopes to minimize topographic modification.*

d. *Clearing and Grading.*

i. *The area of clearing and grading shall be minimized to the maximum extent feasible;*

ii. *Impervious surfaces shall be minimized to the maximum extent feasible;*

iii. *Clearing and grading to create a flat area for lawn or recreation is prohibited in severe erosion hazard areas and steep slopes;*

iv. *Undergrowth shall be preserved to the maximum extent feasible.*

e. *Erosion Control Management.*

i. *The area of vegetation disturbance shall be minimized through a staging plan to develop sites in sequence with full stabilization of early phases, such as infrastructure installation, before disturbance for structures and other facilities in order to minimize erosion potential.*

ii. *Erosion and sedimentation control facilities such as silt fences shall be installed prior to any clearing and grading.*

iii. *Disturbed areas shall be protected from erosion through implementation of best management practices, including groundcovers, such as filter fabrics within*

*twenty-four hours after disturbance. Vegetative cover shall be re-established on disturbed surfaces as soon as feasible, but in all cases prior to the rainy season.*

*iv. A drainage plan shall include:*

*A. Surface drainage, including downspouts, shall not be used in erosion hazard areas or steep slopes. Drainage originating above an erosion hazard area shall be collected and directed by a tight line drain, and provided with an energy dissipative device for discharge to a swale or other acceptable natural drainage areas.*

*B. Storm water retention and detention systems, including percolation systems utilizing buried pipe, are prohibited on steep slopes or severe hazard areas and strongly discouraged on moderate erosion hazard areas.*

*C. On-site sewage disposal system drain fields are prohibited on severe erosion hazard areas and strongly discouraged on moderate erosion hazard.*

*f. Utility lines and pipes shall be permitted in steep slopes or severe and moderate erosion hazard areas only where analysis by a qualified professional certifies that such system will not result in an increase in erosion. The qualified professional shall also certify that the systems are installed as designed and function as predicted.*

*6. Development Standards for Landslide Hazard Areas. Uses and activities permit shall conform to the following standards:*

*a. Protection of Landslide Area and Buffer. The landslide hazard area and associated buffer shall be protected from disturbance, except in compliance with the standards of this section. Modification of topography and vegetation in landslide hazard areas shall be stringently limited to provide multiple benefits of long-term stability of sensitive slopes and related benefits including reduction of erosion potential, reduction of storm water runoff and preservation of related ecological values. Unless otherwise provided or as part of an approved alteration, removal of vegetation from a landslide hazard area or related buffer shall be prohibited. The landslide and buffer shall include woody vegetation adequate to stabilize the soil and prevent mass wasting. If the designated buffer area lacks adequate woody vegetation, the Administrator, after consultation with a qualified professional through the city's peer review process, shall have the authority to require vegetation restoration or other measures to improve slope stability.*

*b. A buffer shall be established from all edges of landslide hazard areas. The size of the buffer shall be determined by the Administrator, after consultation with a qualified professional through the city's peer review process, to minimize or eliminate the risk of death, personal injury, property damage and effects on other elements of the environment resulting from earth movement caused in whole or in part by the development.*

*i. The buffer from the top of the slope shall be designed to protect persons and property from damage due to catastrophic slope failure and slope retreat over the lifetime of its use and provide an area of vegetation to promote the shallow stability, control erosions and multiple benefits to wildlife and other resources. The minimum dimensions of the buffer shall be equal to the greater of:*

*A. The distance from the top of the slope equal to the vertical distance from the toe of slope to the top of slope;*

*B. The distance from the top of the slope equal to the distance from the toe of the slope upslope at a slope of 2:1 (horizontal to vertical) to a point that intersects with the site's ground elevation; or*

*C. Fifty feet from the top of the slope.*

*ii. The minimum buffer from the bottom of a slope shall provide for safety of persons and property from the run-out resulting from slope failure and shall be the greater of:*

*A. The height of the slope; or*

*B. Fifty feet from the toe of the slope.*

*c. Landslide Hazard Area Design Standards:*

*i. Subdivision within landslide hazard areas and associated buffers shall be designed to reduce soil disturbance and removal of vegetation. Land that is located partially within a landslide hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of the hazardous area and buffer with provision for drainage, erosion control and related features that will not adversely affect the hazard area or its buffer. Land within a landslide hazard area and its buffer may not be subdivided to create buildable sites within the landslide hazard area. All plats and short plats will clearly show the boundary of the hazard area and buffer together with a restriction prohibiting development within the hazard area.*

*ii. Roads, driveways, other vehicular access, trails, walkways and parking areas may be permitted only if the standards for alteration exist, including through the provisions of Chapter 8.24 RCW. If access through hazardous areas is granted, exceptions or deviations from technical standards for width or other dimensions and specific construction standards to minimize impacts may be specified. Access roads and trails shall be engineered and built to standards that avoid the need for major repair or reconstruction beyond that which would be required in non-hazard areas and shall be:*

*A. Located in the lease sensitive area of the site.*

*B. Designed to minimize topographic modification with low gradients and/or parallel to the natural contours of the site.*

*C. Retaining walls shall be preferred over cut and fill slopes to minimize topographic modification.*

*iii. Structures may be permitted only if the standards for alteration below are met and shall be designed to meet the following standards:*

*A. Structures and impervious surfaces shall be located on the least sensitive portion of the site and designed to minimize disturbance and removal of vegetation.*

*B. Foundations should conform to the natural contours of the slope and foundations shall be stepped/tiered where possible to conform to existing topography of the site.*

*C. Retaining walls shall be preferred over cut and fill and shall be incorporated into structures wherever feasible.*

*d. Clearing and grading may be permitted only if the standards for alteration below are met and shall meet the following standards:*

*i. Clearing and grading shall minimize ground disturbance to the maximum extent feasible to accommodate allowed development and generally shall not extend more than ten feet beyond the approved development;*

*ii. Undergrowth shall be preserved to the extent feasible; and*

*iii. No dead vegetation, fill or other foreign material shall be placed within a landslide hazard area, other than that approved for bulkhead or other methods of stream bank stabilization as provided in regulations for streams in this chapter and under the Shoreline Master Program.*

*e. Drainage.*

*i. Surface drainage, including downspouts, shall not be directed across the face of a hazard area. If drainage must be discharged from the top of a hazard area to its toe, it shall be collected above the top and directed to the toe by a tight line drain and provided with an energy dissipative device at the toe for discharge to a swale or other acceptable natural drainage areas.*

*ii. Storm water retention and detention systems, including percolation systems utilizing buried pipe, shall be located outside the landslide hazard area and its buffer.*

*f. On-site sewage disposal system drain fields shall be located outside the landslide hazard area and its buffer. The septic system drain field must be in compliance with the regulations of the Lewis County Health Department or its successors.*

*g. Utility lines and pipes shall be permitted in landslide hazard areas. The line or pipe shall be located above ground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide.*

*h. Lot size. For the purpose of determining lot sizes within hazard areas, the Administrator shall review available information, including any required geotechnical assessments and make a decision on a case-by-case basis based on the reports.*

**FINDING:** This standard applies.

**FINDING:** The Applicant provided a Geotechnical Report, Soil Reinforcement Memo, Steep Slope Modeling Memo for reduced steep slope setback, and Steep Slope Variance request. Applicant revised the proposed site plan to ensure no buildable lots would be created within the steep slopes. Applicant's geologist has provided an analysis that supports a reduced setback of 25 feet from top of slope.

**CONDITION OF APPROVAL: Final Engineering Plans shall show for each lot: location within the plat, dimensions of all four sides, and building envelope demonstrating that no lot is being created within a critical area, unless granted by the City. Plans will be reviewed by City prior to final approval.**

**CONDITION OF APPROVAL: No construction, including excavation and landscaping, will occur within the steep slope. Fencing may be constructed along the top of steep slope to designate edge of slope and residential lot.**

**CONDITION OF APPROVAL: No buildings, stormwater ponds, or other structures are allowed within 25 feet of the top of steep slope. A covenant shall be placed on the development as well as a note on the face of the plat.**

*E. Wetlands.*

*1. Purpose. The purpose of this chapter is to:*

*a. Recognize and protect the beneficial functions performed by wetlands. Wetlands constitute important natural resources which provide significant environmental functions including: the control and storage of flood waters, stabilizing stream banks, reduction in erosion, improving water quality through biofiltration, adsorption, retention, and transformation of sediments, nutrients, and toxicants, recharge of ground water and provisions of significant habitat areas for fish and wildlife. Uncontrolled urban-density development in and adjacent to wetlands can eliminate or significantly reduce the ability of wetlands to provide these important functions, thereby detrimentally affecting public health, safety and general welfare.*

*b. Regulate land use to avoid adverse effects on wetlands and maintain the functions and values of wetlands throughout the City of Napavine.*

*c. Establish review procedures for development proposals in and adjacent to wetlands.*

*2. Applicability. The provisions of this chapter apply to any disturbance occurring or land use proposal affecting a wetland or its buffer unless otherwise expressly exempted by this chapter. Except where a contrary intent clearly appears, the provisions of this chapter shall be construed to the maximum feasible extent consistent with the Federal Clean Water Act, 33 USC Section 1251 et seq., and the rules and guidelines promulgated pursuant thereto. Nothing in this chapter shall be construed to preclude application of the State Environmental Policy Act in approving applications not listed in NCAO 14.10.070.*

*3. Identification, Delineation, and Rating.*

*a. Identification and Delineation. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplement. All areas within the City of Napavine meeting the wetland definition and designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this chapter. Wetland delineations are valid for five years; after such date the City of Napavine shall determine whether a revision or additional assessment is necessary. Wetland delineations will be documented on a ground-verified map using either professional surveying methods or an equivalent professional method using GPS with sub-meter accuracy.*

*b. Rating. Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication [14-06-030 or 14- 06-029] or as revised). The descriptions of wetland categories according to the rating system are as follows:*

*i. Category I. Category I wetlands are: (a) relatively undisturbed estuarine wetlands larger than one acre; (b) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; (c) bogs; (d) mature and old-growth forested wetlands larger than one acre; (e) wetlands in*

*coastal lagoons; (f) interdunal wetlands that score eight or nine habitat points and are larger than one acre; and (g) wetlands that perform many functions well (scoring twenty-three points or more). These wetlands: (a) represent unique or rare wetland types; (b) are more sensitive to disturbance than most wetlands; (c) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (d) provide a high level of functions.*

*ii. Category II. Category II wetlands are: (a) estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre; (b) interdunal wetlands larger than one acre or those found in a mosaic of wetlands; or (c) wetlands with a moderately high level of functions (scoring between twenty and twenty-two points).*

*iii. Category III. Category III wetlands are: (a) wetlands with a moderate level of functions (scoring between sixteen and nineteen points); (b) can often be adequately replaced with a well-planned mitigation project; and (c) interdunal wetlands between 0.1 and one acre. Wetlands scoring between sixteen and nineteen points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.*

*iv. Category IV. Category IV wetlands have the lowest levels of functions (scoring fewer than sixteen points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.*

*c. Illegal modifications. Wetland rating categories shall not change due to illegal modifications made to the wetland.*

*d. Responsibility. The wetland delineation is the responsibility of the applicant. The Administrator shall verify the accuracy of the boundary delineation. This review period may be extended when excessively dry conditions prohibit the confirmation of the wetland delineation. If the delineation is found to be in question, the administrator will notify the applicant within thirty working days of receiving the delineation report, citing evidence (for example soil samples) that demonstrates where the delineation is believed to be in error. The applicant then may either revise the delineation and submit another report or administratively appeal. The City of Napavine may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with identification, analysis, and accuracy of critical area delineations.*

*4. Regulated Activities. For any proposed regulated activity, a critical area report may be required to support the requested activity.*

*a. The following activities are regulated if they occur in a regulated wetland or its buffer:*

*i. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;*

*ii. The dumping of, discharging of, or filling with any material;*

*iii. The draining, flooding, or disturbing of the water level or water table;*

*iv. The placing of obstructions;*

*v. The construction, reconstruction, demolition, or expansion of any structure;*

*vi. The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland;*

*vii. Class IV General Forest Practices under the authority of the 1992 Washington State Forest Practices Act Rules and Regulations, WAC 222-12-030, or as thereafter amended;*

*viii. Activities that result in:*

*A. A significant change of water temperature,*

*B. A significant change of physical or chemical characteristics of the sources of water to the wetland,*

*C. A significant change in the timing, frequency,*

*D. depth, or duration of water entering or within the wetland,*

*E. The introduction of pollutants;*

*b. Subdivisions. The subdivision and/or short subdivision of land where wetlands and/or associated buffers are present are subject to the following:*

*i. Land that is located wholly within a wetland and/or wetland buffer may not be subdivided.*

*ii. Land that is located partially within a wetland and/or wetland buffer may be subdivided provided that an accessible and contiguous portion of each new lot is:*

*A. Located outside of the wetland and buffer; and*

*B. Meets the minimum lot size requirements of the City of Napavine zoning code.*

*5. Exempted Wetlands. Wetlands that meet the following criteria are not subject to the avoidance or minimization requirements of the mitigation NCAO 14.10.120.E(8)(a) in accordance with the following provisions, and they may be filled if the impacts are fully mitigated based on the remaining actions in NCAO 14.10.120.E(8)(b).*

*a. All Category IV wetlands that are less than 4000 square feet where it has been shown by the applicant that they are not associated with a riparian areas or their buffers, are not associated with shorelines of the state or their associated buffers, are not part of a wetland mosaic, do not score six or more points for habitat function based on the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication [#14-06-030 or #14-06-029]), or as revised and approved by Ecology) and do not contain a Priority Habitat or Priority Species identified by the Washington Department of Fish and Wildlife and do not contain state or federally listed species or their critical habitat or species of local importance identified in the City of Napavine code.*

*b. Wetlands less than one thousand square feet that meet the above criteria are exempt from the buffer provisions contained in this chapter.*

*6. Wetland Buffers.*

a. *Buffer Requirements. The buffer tables have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington: 201 Update (Ecology Publication [#14-06-030 or #14-06-029], or as revised).*

b. *All buffers shall be measured perpendicularly outward from the delineated wetland boundary. The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community.*

**Table 14.10.120.E(6)-1.**
**Wetland buffer width requirements, in feet, if Table 2 is implemented and a habitat corridor is provided.**

| Category of wetland | Habitat score 3—5 points (corridor not required) | Habitat score 6—7 points | Habitat score 8—9 points | Buffer width based on special characteristics |
|---|---|---|---|---|
| Category I or II: Based on rating of wetland functions (and not listed below) | 75 | 110 | 225 | NA |
| Category I: Bogs and Wetlands of High Conservation Value | NA | NA | 225 | 190 |
| Category I: Forested | 75 | 110 | 225 | NA |
| Category III: All types | 60 | 110 | 225 | NA |
| Category IV: All types | 40 | 40 | 40 | NA |

c. *Buffer Reduction. Developments that produce the listed disturbances may request a buffer reduction from the base buffer widths in Table 14.10.120.E(6)-3. Applicants are required to address the disturbance through the use of applicable minimization measures. Table 14.10.120.E(6)-2 is not a complete list of measures, nor is every example measure required. Though not every measure is required, all effort should be made to implement as many measures as possible. The Administrator shall determine, in coordination with the applicant, which measures are applicable and practicable.*

**Table 14.10.120.E(6)-2. Impact Minimization Measures**

| Examples of disturbance | Activities and uses that cause disturbances | Examples of measures to minimize impacts |
|---|---|---|
| Lights | Parking lots<br>Commercial/Industrial<br>Residential<br>Recreation (e.g., athletic fields)<br>Agricultural buildings | Direct lights away from wetland<br>Only use lighting where necessary for public safety and keep lights off when not needed<br>Use motion-activated lights<br>Use full cut-off filters to cover light bulbs and direct light only |

| Table 14.10.120.E(6)-2. Impact Minimization Measures | | |
|---|---|---|
| **Examples of disturbance** | **Activities and uses that cause disturbances** | **Examples of measures to minimize impacts** |
| | | **where needed**<br>**Limit use of blue-white colored lights in favor of red-amber hues**<br>**Use lower-intensity LED lighting**<br>**Dim light to the lowest acceptable intensity** |
| **Noise** | **Commercial**<br>**Industrial**<br>**Recreation (e.g., athletic fields, bleachers, etc.)**<br>**Residential**<br>**Agriculture** | **Locate activity that generates noise away from wetland**<br>**Construct a fence to reduce noise impacts on adjacent wetland and buffer**<br>**Plant a strip of dense shrub vegetation adjacent to wetland buffer** |
| **Toxic runoff** | **Parking lots**<br>**Roads**<br>**Commercial/industrial**<br>**Residential areas**<br>**Application of pesticides**<br>**Landscaping**<br>**Agriculture** | **Route all new, untreated runoff away from wetland while ensuring wetland is not dewatered**<br>**Establish covenants limiting use of pesticides within 150 ft. of wetland**<br>**• Apply integrated pest management (These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.)** |
| **Stormwater runoff** | **Parking lots**<br>**Roads**<br>**Residential areas**<br>**Commercial/industrial**<br>**Recreation**<br>**Landscaping/lawns**<br>**Other impermeable surfaces, compacted soil, etc.** | **Retrofit stormwater detention and treatment for roads and existing adjacent development**<br>**Prevent channelized or sheet flow from lawns that directly enters the buffer**<br>**Infiltrate or treat, detain, and disperse new runoff from impervious surfaces and lawns** |
| **Pets and human disturbance** | **Residential areas**<br>**Recreation** | **Use privacy fencing**<br>**Plant dense native vegetation to delineate buffer edge and to discourage disturbance**<br>**Place wetland and its buffer in a separate tract**<br>**Place signs around the wetland buffer every 50—200 ft., and for subdivisions place signs at the back of each residential lot**<br>**When platting new subdivisions, locate greenbelts, stormwater** |

| Table 14.10.120.E(6)-2. Impact Minimization Measures | | |
|---|---|---|
| **Examples of disturbance** | **Activities and uses that cause disturbances** | **Examples of measures to minimize impacts** |
| | | **facilities, and other lower-intensity uses adjacent to wetland buffers** |
| **Dust** | **Tilled fields**<br>**Roads** | **Use best management practices to control dust** |

| **Table 14.10.120.E(6)-3.**<br>**Wetland buffer width requirements, in feet, for applicants <u>NOT</u> providing a habitat corridor or implementing measures in Table 14.10.120.E.(6)-2** | | | | |
|---|---|---|---|---|
| **Category of wetland** | **Habitat score 3—5 points** | **Habitat score 6—7 points** | **Habitat score 8—9 points** | **Buffer width based on special characteristics** |
| **Category I & II: Based on rating of wetland functions (and not listed below)** | **100** | **150** | **300** | **NA** |
| **Category I: Bogs and Wetlands of High Conservation Value** | **NA** | **NA** | **300** | **250** |
| **Category I: Forested** | **100** | **150** | **300** | **NA** |
| **Category III: All types** | **80** | **150** | **300** | **NA** |
| **Category IV** | **NA** | **NA** | **NA** | **50** |

*i. Wetlands that score six points or more for habitat function: the buffers in Table 14.10.120.E(6)-1 can be used only if all of the following criteria are met:*

*A. A relatively undisturbed, vegetated corridor at least one hundred feet wide is protected between the wetland and:*

*1. A legally protected, relatively undisturbed and vegetated area (e.g., Priority Habitats, compensatory mitigation sites, wildlife areas/refuges, national, county, and state parks where they have management plans with identified areas designated as Natural, Natural Forest, or Natural Area Preserve, or*

*2. An area that is the site of a Watershed Project identified within, and fully consistent with, a Watershed Plan as defined by RCW 89-08-460, or*

*3. An area where development is prohibited according to the provisions of the local shoreline master program, or*

*4. An area with equivalent habitat quality that has conservation status in perpetuity, in consultation with WDFW.*

*B. The corridor is permanently protected for the entire distance between the wetland and the shoreline or legally protected area by a conservation easement, deed restriction, or other legal site protection mechanisms.*

*C. Presence or absence of the shoreline or Priority Habitat must be confirmed by a qualified biologist or shoreline Administrator.*

*D. The measures in Table 2 are implemented, as applicable, to minimize the impacts of the adjacent land uses.*

*ii. For wetlands that score five or fewer habitat points, only the measures in Table 2 are required for the use of the buffers in Table 1.*

*iii. If an applicant does not apply the mitigation measures in Table 2 or is unable to provide a protected corridor, then the buffers in Table 3 shall be used.*

*iv. The buffer widths in Tables 1 and 3 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is un-vegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer must either be planted to create the appropriate native plant community or be widened to ensure that the buffer provides adequate functions to protect the wetland.*

*d. Increased Wetland Buffer Width. Buffer widths shall be increased on a case-by-case basis as determined by the Administrator when a wider buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to the protection of the functions and values of the wetland. The documentation shall include but not be limited to the following criteria:*

*i. The wetland is used by a state or federally listed plant or animal species. These species would be those listed under WAC 220-610-010, 50 CFR 17.11, 50 CFR 17.12, or other state or federal regulations.*

*ii. The wetland has critical habitat; or a priority area for a priority species as defined by WDFW; or Wetlands of High Conservation Value as defined by the Washington Department of Natural Resources' Natural Heritage Program.*

*iii. The adjacent land is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts.*

*iv. The adjacent land has minimal vegetative cover.*

*v. The land has slopes greater than thirty percent.*

*e. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:*

*i. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a dual-rated wetland with a Category I area adjacent to a lower-rated area.*

*ii. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical area report from a qualified wetland professional.*

*iii. The total area of the buffer after averaging is equal to the area required without averaging.*

*iv. The buffer at its narrowest point is never less than either seventy-five percent of the required width or seventy-five feet for Category I and II, fifty feet for Category III, and twenty-five feet for Category IV, whichever is greater.*

*f. Averaging to allow reasonable use of a parcel may be permitted when all of the following are met:*

*i. No feasible alternatives to the site design could be accomplished without buffer averaging.*

*ii. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical area report from a qualified wetland professional.*

*iii. The total buffer area after averaging is equal to the area required without averaging.*

*iv. The buffer at its narrowest point is never less than either seventy-five percent of the required width or seventy-five feet for Category I and II, fifty feet for Category III and twenty-five feet for Category IV, whichever is greater.*

*g. Allowed Buffer Uses. The following uses may be allowed within a wetland buffer in accordance with the review procedures of this Chapter, provided they are not prohibited by any other applicable law, and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:*

*i. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.*

*ii. Passive recreation facilities designed in accordance with an approved critical area report, including walkways and trails, provided that they have no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent of the wetland buffer area, and located to avoid removal of significant vegetation. They should be limited to pervious surfaces no more than five feet in width and designed for pedestrian use only. Raised boardwalks utilizing non-treated pilings may be acceptable, and wildlife-viewing structures.*

*iii. Educational and scientific research activities.*

*iv. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.*

*v. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.*

*vi. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not alter the ground water connection to the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column would be disturbed.*

*vii. Enhancement of a wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious*

*Weed Control Board list of noxious weeds should be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.*

*viii. Repair and maintenance of legally established non-conforming uses or structures, provided they do not increase the degree of nonconformity.*

*h. Functionally Disconnected Buffer Area. Buffers may exclude areas that are functionally and effectively disconnected from the wetland by an existing public or private road or historically preexisting structure, as determined by the administrator. Functionally and effectively disconnected means that the road or other significant development blocks the protective measures provided by a buffer. Significant developments shall include built public infrastructure such as roads and railroads, and private developments such as homes or commercial structures. The director shall evaluate whether the interruption will affect the entirety of the buffer. Individual structures may not fully interrupt buffer function. In such cases, the allowable buffer exclusion should be limited in scope to just the portion of the buffer that is affected. Where questions exist regarding whether a development functionally disconnects the buffer, or the extent of that impact, the administrator may require a critical area report to analyze and document the buffer functionality.*

*i. Signs and Fencing:*

*i. Temporary markers. The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary high-visibility fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.*

*ii. Permanent signs. As a condition of any permit or authorization issued pursuant to this chapter, the Administrator may require the applicant to install permanent signs along the boundary of a wetland or buffer.*

*A. Permanent signs shall be made of an enamel-coated metal face attached to a metal post or another non-treated material of equal durability. Signs shall be posted at an interval of one every fifty feet, or one per lot if the lot is less than fifty feet wide, and shall be maintained by the property owner in perpetuity. The signs shall be worded as follows or with alternative language approved by the administrator:*

**"Protected Wetland Area**
**Do Not Disturb**
**Contact The City of Napavine**
**Regarding Uses, Restrictions,**
**and Opportunities for Stewardship"**

*B. The provisions of subsection i may be modified as necessary to assure protection of sensitive features or wildlife.*

*iii. Fencing*

A. *The applicant shall be required to install a permanent fence around the wetland or buffer when adjacent activities could degrade the wetland or its buffer. Examples include domestic animal grazing, unauthorized access by humans or pets, noise generating activities, etc.*

B. *Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.*

j. *Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive, non-native weeds is required for the duration of the mitigation bond (NCAO 14.10.120.E(8)(j.ii.A.10)).*

k. *Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in NCAO 14.10.120.E(8)(k) of this chapter.*

l. *Overlapping Critical Area Buffers. If buffers for two critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.*

7. *Critical Area Report for Wetlands:*

a. *If the administrator determines that the site of a proposed development includes, is likely to include, or is adjacent to a wetland or wetland buffer, a wetland report, prepared by a qualified professional, shall be required. The expense of preparing the wetland report shall be borne by the applicant.*

b. *Minimum Standards for Wetland Reports. The written report and the accompanying plan sheets shall contain the following information, at a minimum:*

i. *The written report shall include at a minimum:*

A. *The name and contact information of the applicant; the name, qualifications, and contact information of the primary author(s) of the report; a description of the proposal; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project.*

B. *A statement specifying the accuracy of the report and all assumptions made and relied upon.*

C. *Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc.*

D. *A description of the methodologies used to conduct the wetland delineations, wetland ratings, and impact analyses, including references.*

E. *Identification and characterization of all critical areas, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area. For areas off the project site, estimate conditions within three hundred feet of the project boundaries using all reliable available information.*

F. *For each wetland identified on site and within three hundred feet of the project boundary, provide the completed wetland rating, per NCAO 14.10.120.E(3)(b) of this Chapter; required buffers; hydrogeomorphic classification; wetland area based on the field delineation (area for on-site portion and estimate entire wetland area including off-site portions);*

*Cowardin classifications; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlets/outlets, estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide area estimates, classifications, and ratings based on entire wetland units, not only the portion present on the proposed project site.*

G. *A description of the proposed actions, including an estimation of area of impacts to wetlands and buffers based on the field delineation, and an analysis of site development alternatives, including a no-development alternative.*

H. *An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development, considering past development and potential future development.*

I. *A description of how mitigation sequencing has been followed, pursuant to section NCAO 14.10.120.E(8)(a).*

J. *An evaluation of the functions of the wetland and its buffer, including references for the method used and data sheets.*

K. *A discussion of the potential impacts to the wetland(s) associated with any anticipated hydroperiod alterations from the project.*

ii. *The site plan sheet(s) shall include, at a minimum:*

A. *Maps (to scale) depicting delineated and mapped wetlands and required buffers on site, including buffers for off-site wetlands that extend onto the project site; the development proposal; other critical areas and their buffers; grading and clearing limits; and areas of proposed impacts to wetlands and/or buffers (include square footage or acreage).*

B. *A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into wetland buffers.*

8. *Compensatory Mitigation:*

a. *Mitigation Sequencing. Before being authorized to impact any wetland or its buffer, an applicant shall demonstrate that they have implemented mitigation in the following order:*

i. *Avoid impacts altogether by not taking a certain action or parts of an action.*

ii. *Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.*

iii. *Rectify impacts by repairing, rehabilitating, or restoring the affected environment.*

iv. *Reduce or eliminate impacts over time by preservation and maintenance operations.*

v. *Compensate for impacts by replacing, enhancing, or providing substitute resources or environments.*

vi. *Monitor required compensation and take remedial or corrective measures when necessary.*

b. *Requirements for Compensatory Mitigation:*

i. *Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater functions. Compensatory mitigation plans shall be consistent with this chapter and Mitigation in Washington State-Part 2: Developing Mitigation Plans—Version 1 (Ecology Publication #06-06-011b, Olympia, WA, March 2006, or as revised), and Selecting Wetland Mitigation Sites Using a Watershed Approach Western Washington (Ecology Publication #09-06-32).*

ii. *Mitigation ratios, if used, shall be consistent with NCAO 14.10.120.E(8)(h).*

iii. *Mitigation requirements may be determined using the Credit-Debit Method described in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington (Ecology Publication #10-06-011) or as revised consistent with NCAO 14.10.120.E(8)(h).*

iv. *Plantings used in mitigation actions shall be native species appropriate to the ecoregion.*

v. *The following areas within a proposed compensation site shall not contribute to satisfying the requirements for compensatory mitigation:*

A. *Easements for utility corridors, maintained stormwater facilities, and rights-of-way.*

B. *Driveways.*

C. *Roads.*

D. *Any paved or graveled areas intended to convey vehicle or foot traffic.*

vi. *Buffers on Wetland Mitigation Sites. All wetland mitigation sites shall have buffers consistent with the buffer requirements of this chapter.*

c. *Compensating for Lost or Affected Functions. Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:*

i. *The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limited within a watershed through an existing watershed plan or a local or regional study that characterizes watershed processes; or*

ii. *Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by a watershed plan, such as replacement of historically diminished wetland types.*

d. *Approaches to Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on the approaches listed below:*

*i. Wetland Mitigation Banks. Credits from a wetland mitigation bank certified under Chapter 173-700 WAC may be used to compensate for impacts located within the service area specified in the mitigation bank instrument if all the following are met:*

*A. The administrator determines that it would provide appropriate compensation for the proposed impacts; and*

*B. The proposed use of credits is consistent with the terms and conditions of the mitigation bank instrument.*

*C. Mitigation ratios are consistent with ratios specified in the mitigation bank instrument.*

*ii. Permittee-responsible, concurrent mitigation. Concurrent mitigation is a form of permittee-responsible mitigation implemented at the same time permitted impacts are occurring. The permittee is responsible for implementation and success of the compensation. Concurrent mitigation may occur at the site of the permitted impacts or at an off-site location, usually within the same watershed. Permittee-responsible, concurrent mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the administrator's satisfaction that the proposed approach is ecologically preferable to use of a bank, consistent with the criteria in this section.*

*iii. Permittee-responsible, advance mitigation. Advance mitigation is a form of permittee responsible mitigation implemented before a permitted impact takes place. It is designed to compensate for impacts expected to occur in the future. The applicant proposing the advance mitigation is the only one who can use the credits generated. Credits cannot be sold or transferred to another applicant. Advance mitigation proposals should be developed in accordance with state and federal rules and guidance on advance mitigation (Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation, Ecology Publication #12-06-015, December 2012, and Chapter 4.2 of Wetland Mitigation in Washington State-Part 1: Policies and Guidance—Version 2, Ecology Publication #21-06-003, April 2021, or as revised).*

*e. Methods of Compensatory Mitigation. Mitigation for wetland and buffer impacts shall rely on a method listed below in order of preference. A lower-preference form of mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the administrator's satisfaction that all higher-ranked types of mitigation are not viable, consistent with the criteria in this section.*

*i. Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former or degraded wetland. Restoration is divided into two categories:*

*A. Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland area and functions. Example activities could include removing fill, plugging ditches, or breaking drain tiles to restore a wetland hydroperiod, which in turn will lead to restoring wetland biotic communities and environmental processes.*

*B. Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions and environmental processes to a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland area. [In other words, the area already meets wetland criteria, but hydrological processes have been altered. Rehabilitation involves restoring historic hydrologic processes.] Example activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.*

*ii. Establishment (Creation): The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland where a wetland did not previously exist at an upland site. Establishment results in a gain in wetland area and functions. An example activity could involve excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils by intercepting groundwater, and in turn supports the growth of hydrophytic plant species.*

*A. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the administrator may authorize establishment of a wetland and buffer upon demonstration by the applicant's qualified wetland professional that:*

*1. The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that establishment of a wetland at the site will not likely cause hydrologic problems elsewhere;*

*2. Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and*

*3. The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.*

*iii. Preservation (Protection/Maintenance). The removal of a threat to, or preventing the decline of, wetlands by an action in or near those wetlands. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms such as recording conservation easements and providing structural protection like fences and signs. Preservation does not result in a gain of aquatic resource area or functions but may result in a gain in functions over the long term. Preservation of a wetland and associated buffer can be used only if:*

*A. The administrator determines that the proposed preservation is the best mitigation option;*

*B. The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;*

*C. The area proposed for preservation is of high quality or critical for the health and ecological sustainability of the watershed or sub-basin. Some of the following features may be indicative of high-quality sites:*

*1. Category I or II wetland rating (using the wetland rating system).*

2. *Rare or irreplaceable wetland type (e.g., peatlands, mature forested wetland, estuaries, vernal pools, alkali wetlands) or aquatic habitat that is rare or a limited resource in the area.*

3. *The presence of habitat for threatened or endangered species (state, federal, or both).*

4. *Provides biological and/or hydrological connectivity to other habitats.*

5. *Priority sites identified in an adopted watershed plan.*

D. *Permanent preservation of the wetland and buffer shall be provided through a legal mechanism such as a conservation easement or tract held by an appropriate natural land resource manager/land trust.*

E. *The administrator may approve another legal and administrative mechanism in lieu of a conservation easement if it is determined to be adequate to protect the site.*

iv. *Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s). Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in the gain of selected wetland function(s) but may also lead to a decline in other wetland function(s). Enhancement does not result in a gain in aquatic resource area. Enhancement activities could include planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods in existing wetlands. Applicants proposing to enhance wetlands or associated buffers shall demonstrate how the proposed enhancement will increase the wetland's/buffer's functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.*

v. *Alternative Types of Mitigation/Resource Tradeoffs. The administrator may approve alternative mitigation proposals that are based on best available science, such as priority restoration plans that achieve restoration goals identified in the SMP. Alternative mitigation proposals shall provide an equivalent or better level of ecological functions and values than would be provided by standard mitigation approaches. Alternative mitigation approaches shall comply with all reporting, monitoring, and performance measures of this section including adherence to mitigation sequencing. The City of Napavine may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical areas.*

A. *The administrator will consider the following for approval of an alternative mitigation proposal:*

1. *Clear identification of how an alternative approach will achieve equal or better ecological benefit.*

2. *The proposal uses a watershed approach consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach Western Washington (Ecology Publication #09-06-32, Olympia, WA, December 2009).*

3. *All impacts are identified, evaluated, and mitigated.*

4. *Methods to demonstrate ecological success are clear and measurable.*

*f. Location of Compensatory Mitigation. Permittee-responsible compensatory mitigation actions shall be conducted using a watershed approach and shall generally occur within the same sub-drainage basin. However, when the applicant can demonstrate that a mitigation site in a different sub-drainage basin is ecologically preferable, it should be used.*

*i. The following criteria will be evaluated when determining whether on-site or off-site mitigation is ecologically preferable. When considering the location of mitigation, preference should be given to using programmatic approaches, such as a mitigation bank.*

*i. No reasonable opportunities exist on site or within the sub-drainage basin or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capability of the site to compensate for the impacts. Considerations should include anticipated replacement ratios for wetland mitigation, buffer conditions and required widths, available water to maintain anticipated hydrogeomorphic class(es) of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);*

*ii. On-site mitigation would require elimination of high-quality upland habitat.*

*iii. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions compared to the altered wetland.*

*iv. Off-site locations shall be in the same sub-drainage basin unless:*

*A. Watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City of Napavine and strongly justify locating mitigation at another site; or*

*B. Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;*

*v. The design for the compensatory mitigation project needs to be appropriate for its position in the landscape. Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland.*

*g. Timing of Compensatory Mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will impact wetlands. At the least, compensatory mitigation shall be completed immediately following wetland impacts and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.*

*i. The administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could produce a high probability of failure or*

*significant construction difficulties. For example, a project delay that creates conflicts with other regulatory requirements (fisheries, wildlife, stormwater, etc.) or installing plants should be delayed until the dormant season to ensure greater survival of installed materials. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the delay shall include a written justification that documents the environmental constraints that preclude timely implementation of the compensatory mitigation plan. The justification will be verified by the City of Napavine who will issue a formal decision.*

*h. Wetland Mitigation Ratios.*

**Table 14.10.120.E(8)(h). Compensation Ratios for Permanent Impacts**

| Category of Impacted Wetland (Based on function score) | Re-establishment or Creation | Rehabilitation | Preservation | Enhancement |
|---|---|---|---|---|
| Category I | 4:1 | 8:1 | 16:1 | 16:1 |
| Category II | 3:1 | 6:1 | 12:1 | 12:1 |
| Category III | 2:1 | 4:1 | 8:1 | 8:1 |
| Category IV | 1.5:1 | 3:1 | 6:1 | 6:1 |
| Category I Wetlands of High Conservation Value (based on special characteristics) | 6:1 | 12:1 | 24:1 | 24:1 |
| Category I Forested (Based on special characteristics) | 6:1 | 12:1 | 24:1 | 24:1 |

**Note: Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or re-establishment. See Table 6B-2, Wetland Mitigation in Washington State - Part 1: Agency Policies and Guidance -Version 2, (Ecology et al., 2021 or as revised). See also NCAO 14.10.120.E(8)(e.iii) for more information on using preservation as compensation.**

*i. Credit-Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance Wetland Mitigation in Washington State Part 1 (Ecology Publication # 21-06-003, April 2021), the Administrator may allow mitigation based on the Credit-Debit Method developed by the Department of Ecology in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington57.*

*j. Mitigation Plan. When a project involves wetland and/or buffer impacts, a mitigation plan prepared by a qualified professional shall be required, meeting the following minimum standards:*

*i. Wetland Critical Area Report. A critical area report for wetlands shall accompany or be included in the compensatory mitigation plan and include the minimum parameters described in NCAO 14.10.120.E(7)(b), Minimum Standards for Wetland Reports.*

*ii. Mitigation Plan and Plan Sheets. The report shall include a written plan and plan sheets that contain, at a minimum, the following elements.*

*A. The written report shall be prepared by a qualified professional and contain, at minimum:*

*1. The name and contact information of the applicant; the name, qualifications, and contact information of the primary author(s) of the compensatory mitigation plan; a description of the development proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and federal wetland related permits required for the project; and a vicinity map for the project.*

*2. Description of how the development project has been designed to avoid, minimize, or reduce adverse impacts to wetlands.*

*3. Description of the existing wetland and buffer areas proposed to be altered. Include acreage or square footage, water regime, vegetation, soils, functions, landscape position, and surrounding land uses. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based NCAO 14.10.120.E(3)(b), Wetland Ratings.*

*4. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions, including acreage or square footage of wetlands and uplands, water regime, sources of water, vegetation, soils, functions, landscape position, and surrounding land uses. Estimate future conditions in this location if the compensation actions are not undertaken.*

*5. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, established, or restored compensatory mitigation areas. Include illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions.*

*6. A description of the proposed actions for compensation of wetland and buffer areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and expected categories of wetlands.*

*7. A description of the proposed mitigation construction activities and timing of activities.*

*8. Performance standards (measurable standards for years post installation) for wetland and buffer areas, a monitoring schedule, a maintenance schedule, and actions proposed by year.*

*9. A discussion of ongoing management practices that will protect wetlands after the development project has been implemented, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands).*

*10. As required, a bond estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant*

*materials, construction materials, installation and oversight, maintenance at least twice per year for up to ten years, annual monitoring field work and reporting, contingency actions for a maximum of the total required number of years for monitoring, and removal of all nonnatural site implements (e.g., irrigation equipment, construction fencing, plant protectors, weed barrier fabric) at the end of the monitoring period.*

*B. The scaled plan sheets shall contain, at a minimum:*

*1. Mapped, ground-verified edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, and location of proposed wetland and/or buffer compensation actions.*

*2. Existing topography, in the zone of the proposed compensation actions if any grading activity is proposed in the compensation area(s). Also include existing cross sections of wetland areas on the development site that are proposed to be altered and of the proposed areas of wetland and buffer compensation.*

*3. Conditions expected from the proposed actions on site, including future hydrogeomorphic classes, vegetation community types by Cowardin class (wetland and upland), and future hydroperiods, or when applicable include a reference to these details within the mitigation plan.*

*4. Required wetland buffers for existing wetlands and proposed mitigation areas. Also identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter.*

*5. A planting plan for the compensation area, including all species by proposed community type and hydroperiod, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, and timing of installation or include a reference to these details within the mitigation plan.*

*k. Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a minimum 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.*

*l. Protection of the Mitigation Site. A conservation covenant shall be recorded in a form approved by the city attorney as adequate to incorporate the other restrictions of this section and to give notice of the requirement to obtain a permit prior to engaging in regulated activities within a wetland area or its buffer.*

*m. Monitoring. All proposed mitigation (not including the purchase of mitigation bank credits) shall include provisions for annual monitoring and performance standards for a period of three years minimum, five years being standard, and ten years when the replacement of forested habitat, or as approved by the administrator for projects with minimal impacts. For example, temporary impacts to herbaceous cover that require reseeding grasses.*

*i. The mitigation plan shall include monitoring elements that ensure success for the wetland and buffer's values and functions. If the mitigation goals are not attained*

*within the specified monitoring period, the applicant remains responsible for managing the mitigation project until the mitigation plan's goals are achieved.*

9. *Unauthorized Alterations and Enforcement*

    a. *When a wetland or its buffer has been altered in violation of this chapter, all ongoing development work shall stop, and the critical area shall be restored. The administrator shall have the authority to issue a stop-work order to cease all ongoing development work and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this chapter.*

    b. *Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by the administrator. Such a plan shall be prepared by a qualified professional using currently accepted scientific principles and shall describe how the actions proposed meet the minimum requirements described in NCAO 14.10.120.E(7)(b). The administrator may, at the applicant's or other responsible party's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or other responsible party for revision and re-submittal.*

**FINDING:** This standard applies. Applicant has provided a Critical Areas Report (CAR), Wetland Mitigation Plan, Wetland Buffer Plan, and Site Plan showing Wetland and Buffer Impacts. There are four wetlands mapped onsite; Wetland A is the only one within Phase 1. Wetland A is Category II with a rating of 21 and Habitat Score of 7. It is identified as a riverine/slope wetland associated with a surface water drainage corridor of Stream 1. The mitigated buffer for Wetland A is 110-feet. The other 3 wetlands are in Phase 2; therefore, impacts and mitigation will be evaluated at the time of Complete Application for Phase 2.

Washington State Department of Ecology conducted an onsite visit to confirm the location of wetlands, functional ratings, and habitat score. Even though future Phase 2 is not evaluated within this staff report, Ecology required the Applicant to update their Site Plan to denote the location and size of Wetland D.

**CONDITION OF APPROVAL: Prior to Engineering Approval, Applicant must submit to the City all applicable State and Federal permits. Applicant shall follow the approved mitigation plan.**

**CONDITION OF APPROVAL: Wetland buffer areas shall be marked prior to construction and permanently complying with NMC 14.10.120. Applicant shall install permanent fencing complying with NMC 14.10.120.**

**CONDITION OF APPROVAL: Final Engineering Plans shall show for each lot: location within the plat, dimensions of all four sides, and building envelope demonstrating that no lot is being created within a critical area, unless granted by the City. Plans will be reviewed by City prior to final approval.**

**CONDITION OF APPROVAL: No construction, including excavation and landscaping, will occur within critical areas, unless granted by the City.**

*14.10.150 Application fees.*

*At the time of application for land use review or critical areas review, the applicant shall pay a critical areas review fee, adopted and amended by the city council, from time to time by resolution.*

**FINDING:** This standard applies.

*14.10.160 Bonds to insure mitigation, maintenance and monitoring.*

*A. When mitigation required pursuant to a development proposal is not completed prior to the final permit approval, such as final plat approval or final building inspection, the administrator shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the administrator. If the development proposal is subject to mitigation, the applicant shall post a performance bond and a mitigation bond or other security on a form and amount deemed acceptable by the administrator to ensure mitigation is fully functional.*

*B. The bond shall be in the amount of one hundred twenty-five percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical areas that are at risk, whichever is greater and the cost of maintenance and monitoring for a ten-year period.*

*C. The bond shall be in the form of an assignment of savings account, an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the city attorney or other method acceptable to the planning administrator.*

*D. Bonds or other security authorized by this section shall remain in effect until the administrator determines, in writing, that the standards bonded for have been met. Mitigation bonds or other security shall be held by the city for a minimum of ten years to ensure that the required mitigation has been fully implemented and demonstrated to function and may be held for longer periods when necessary.*

*E. Depletion, failure or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring of restoration.*

*F. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring or restoration.*

*G. Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within thirty days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default and the administrator may demand payment of any financial guarantees of require other action authorized by the city code or any other law.*

*H. Any funds recovered pursuant to this section shall be used to complete the required mitigation, maintenance or monitoring.*

**FINDING:** This standard applies.

**CONDITION OF APPROVAL: The Performance Bond shall be in place and proof provided to the City prior to construction.**

*14.10.170 Critical area inspections.*

*Reasonable access to the site shall be provided to the city, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.*

**FINDING:** This standard applies.

*Title 16 SUBDIVISIONS*

*Chapter 16.06 BOUNDARY LINE ADJUSTMENTS*

*16.06.010 Purpose.*

*The purpose of this chapter is to establish procedures for the approval of boundary line adjustments in order to ensure that such divisions of land are accomplished in an orderly manner, with proper records established, and in compliance with applicable laws.*

*16.06.020 Authority.*

*This chapter is adopted pursuant to the authority or RCW 35A.63.100(3), Chapter 58.17 RCW, and laws of the state of Washington.*

*16.06.030 Definition.*

*A boundary line adjustment is defined as a division of land made for the purpose of alteration by adjusting boundary lines, between platted or unplatted lots or both, which does not create any additional lot, tract, parcel, site, or division, nor create any lot, tract, parcel, site, or division which contains insufficient area and dimensions to meet minimum requirements for width and area for a building site and may be accomplished in nonconforming situations when the degree of nonconformity is not increased.*

*16.06.040 Scope.*

*This chapter is established to accommodate minor alterations in the locations of lot boundaries of existing lots and to establish the criteria for the land use administrator to evaluate such changes.*

*16.06.050 Permit decision and appeal process.*

*The director of planning and community development shall render decisions on boundary line adjustments through an administrative process type.*

*16.06.060 Application.*

*All applications for boundary line adjustments shall be submitted to the director on application forms made available in the community development department. The application shall include the signatures of all property owners affected by the adjustment. At least one original drawing, one copy and one eight and one-half by eleven-inch copy containing the information prescribed in subsection B of this section. In addition, a drawing measuring not less than eight and one-half inches by fourteen inches, drawn to scale, shall be provided with the following information:*

*A. Existing property lines shown as dashed or broken lines, and adjusted property lines shown as solid lines;*

*B. The drawing shall be prepared by a professional land surveyor or professional engineer as prescribed in NMC 16.16.060, drawn to scale with accurate dimensions, and clearly showing the following information:*

*1. A label identifying the map as a "boundary line adjustment";*

2. *Reference the boundary line application number on the face of the map;*
3. *The names and addresses of the grantor and grantee;*
4. *The name of the land surveyor or engineer;*
5. *A vicinity map;*
6. *The boundary lines of the parcels prior to the BLA, clearly labeled;*
7. *The boundary lines of the parcels as adjusted by the BLA, clearly labeled;*
8. *The acreage of the parcels proposed following the BLA;*
9. *Any monuments and markers of record, a minimum of two corners must be set;*
10. *The Grantor parcel identified and labeled by the letter "A";*
11. *The Grantee parcel identified and labeled by the letter "B";*
12. *The portion being transferred identified and labeled by the letter "C";*
13. *The location, width, and names of all existing streets, alleys, or easements within the tract or adjacent thereto and indication as to whether they be public or private;*
14. *The location of existing structures, fences, buildings and improvements within twenty-five feet of the boundary line(s) being altered;*
15. *The location of natural features such as water bodies, rivers, steep slopes and wetlands within twenty-five feet of the boundary line(s) being altered;*
16. *The date, and north arrow;*
17. *A signature block for the approval and signature of the administrator, and the date signed;*
18. *The appropriate fee as established by the city council by resolution.*

*16.06.070 Review and approval criteria.*

A. *The land use administrator shall review and approve, approve with conditions, or disapprove boundary line adjustments as necessary to ensure compliance with the standards below. The land use administrator shall make written findings that the declaration of boundary line adjustment shall not:*
   1. *Increase the number of lots;*
   2. *Diminish the size of any lot so as to result in a lot of less area than prescribed by zoning or other regulations;*
   3. *Create a subdivision alteration, as contemplated in RCW 58.17.040 as now or hereafter amended, by actions that include the following:*
      a. *Creating or diminishing any easement recorded on the plat or short plat;*
      b. *Diminishing or impairing drainage, water supply, sanitary sewage disposal, and access, including fire protection access, to any lot;*
      c. *Amending or violating the conditions of approval for a previously platted property;*
   4. *Increase the nonconforming aspects of an existing nonconforming lot;*
   5. *Replat, or vacate a plat or short plat;*

6. *Reduce a setback or lot width below the minimum required by the zoning code.*

B. *In the event a proposed boundary line adjustment creates a lot that has five or more corners, the land use administrator shall base the approval or denial on whether the lot shape is necessary or desirable due to factors including, but not limited to, critical areas, topography, natural features, street layouts, access, or existing parcel boundaries. The land use administrator may deny the creation of lots with five or more corners if the primary purpose of the lot shape is to meet minimum lot size or dimension requirements.*

C. *The community development department shall take action on the request within twenty working days from the date the application is deemed complete. The applicant shall be notified in writing of the action.*

*16.06.080 Recording.*

*If the proposed boundary line adjustment is approved:*

A. *The applicant shall cause a survey map to be prepared and recorded with the Lewis County Auditor's Office on reproductive mylar material (stabilized drafting film) measuring at least eleven inches by seventeen inches. Full surveys are not required for boundary line adjustments when a single property line is involved. At a minimum, the mylar shall contain the following information:*

1. *A north point, graphic scale and small vicinity map;*
2. *Old property lines and dimensions as dashed or broken lines, new property lines and dimensions as solid lines;*
3. *All property lines shall be fully dimensioned, with the area calculations for each lot noted on the face of the plat;*
4. *Correct street names and current zoning designation;*
5. *Names of all affected property owners and addresses of affected parcels. If a parcel is vacant, an address will be assigned by the city;*
6. *Building locations, building setbacks (distance from existing structures to nearest property lines), location of easements, utility connection points and public and private streets;*
7. *Identification of all lots involved as Lot 1, Lot 2, etc.;*
8. *Signature blocks for all property owners;*
9. *Signature blocks for the community development director and public works director.*

B. *Legal descriptions shall be prepared for each lot after the boundary has been relocated, and the legal description for each lot shall be placed on the face of the survey map.*

C. *Any previous short plat or boundary line adjustments shall be noted on the survey map in the title block or plat notes.*

D. *The survey map shall contain a surveyor's certificate consistent with RCW 58.09.080 and all other certificates and other information required by Chapter 58.09 RCW.*

E. *A copy of the recorded survey shall be provided to the community development department.*

*F. On the face of the survey map, the language of any and all covenants, deeds, restrictions, or other property use limitations on the property shall be set forth, together with the volume and page where such language is recorded.*

*16.06.090 Appeals.*

*A. Any person aggrieved by the decision of the community development director may appeal the decision to the Napavine City Council.*

*B. Appeals shall be submitted to the community development department in writing within fourteen calendar days following the date of mailing the decision to the applicant.*

**FINDING:** This standard applies. The Applicant submitted an application for Boundary Line Adjustment. Parcel 018418003000 is being reconfigured to include the entirety of Phase 1. Parcels 018418001000 and 018409000000 are reconfigured comprising Phase 2. No new lots are created due to the proposed Boundary Line Adjustment.

**FINDING:** More than five (5) points are used for each of the three parcels. The points either follow natural/environmental features or are closures for the adjustments. The BLA should be supported based upon the environment and development plans.

**FINDING:** The first BLA map submitted May 24, 2024 did not fully comply with the Approval Criteria. The second BLA map submitted on March 11, 2025 does comply with Napavine's requirements.

**CONDITION OF APPROVAL: Applicant shall record the City approved Boundary Line Adjustment with Lewis County Auditor's Office and provide a copy of the Recorded document to the City.**

*Chapter 16.12 PRELIMINARY PLAT PROCEDURE.*

*16.12.010 Preliminary plat—Presubmission inspection.*

*Before a prospective subdivider submits a preliminary plat, he or his agent or engineer shall request a site inspection from the city planner. Accompanying the subdivider and the city planner shall be the water and sewer superintendent of the city, the city engineer, or their representatives, and, if possible, a representative from the Soil Conservation Service. The city planner will, at the end of the inspection, sign a letter for the applicant indicating that this requirement has been fulfilled, while keeping a copy of the letter for insertion in the plat file when the applicant submits the preliminary plat.*

*16.12.020 Preliminary plat—Application for approval.*

*For the purpose of expediting the final approval of any plat, the subdivider shall apply to the city planning commission, at the office of the administrator on such forms as may be provided by the commission, for the approval of the preliminary plat. Together with the application, the subdivider shall submit sixteen copies of the preliminary plat at least sixty days prior to the commission meeting at which action is desired. He shall, at that same time, pay a plat fee which is not refundable, by cash or certified check, payable to the general fund of the city …*

*The administrator, on behalf of the planning commission, shall assign the plat a permanent file number and shall submit copies of the plat to:*

*A. County and city engineers, health officer and other county, city and state officials concerned within the scope of their official functions;*

*B. Director of Highways when such plats are located adjacent to the rights-of-way of existing and known proposed state highways;*

*C. The proper city officials, when such land to be platted is adjacent to or within a distance of one mile~ from the corporate limits of the city, or which contemplates the use of any city utilities.*

*16.12.030 Preliminary plat.*

*A. Preparation. The subdivider shall prepare a preliminary plat, together with improvement plans and other supplementary material~ as may be required to indicate the general program and objectives of the project. To assure knowledge of existing conditions and city requirements to obtain compliance with existing city development plans, the subdivider may confer with the city engineer prior to preparation of the preliminary plat.*

*B. Scope. The preliminary plat need not be a finished drawing, but it should show all pertinent information to scale, in order that the planning commission may properly review the proposed development.*

*C. Partial Development. Where the plat to be subdivided contains only a part of the tract owned or controlled by the subdivider, the planning commission may require a sketch of a tentative layout for streets in the unsubdivided portion.*

*D. Information Required. The preliminary plat shall include the following information:*

*1. Detailed Map. The preliminary plat shall be drawn at a maximum scale of one inch equals fifty feet, minimum scale of one inch equals two hundred feet, and for areas over one hundred sixty acres, one inch equals two hundred feet.*

*2. General Information. The following general information shall be shown on the preliminary plat:*

*a. Proposed Name of the Subdivision. The name must not duplicate nor resemble the name of another subdivision in the county and shall be approved by the planning commission.*

*b. Date, north point and scale of drawing.*

*c. Appropriate identification clearly stating the map is preliminary.*

*d. Location of the subdivision by section, township and range and a legal description sufficient to define the location and boundaries of the proposed tract or the tract designation or other description according to the real estate record of the county assessor.*

*e. Names and addresses of the owner or owners, subdivider, engineer or surveyor, and land planner or landscape architect.*

*3. Existing Conditions. The following existing conditions shall be shown on the preliminary plat:*

*a. The location, widths and names of all existing or platted streets or other public ways within or adjacent to the tract; railroad rights-of-way and other important features, such as section lines and corners, city boundary lines and monuments as available from city engineer's records.*

*b. Contour lines having the following intervals:*

*i. Two-foot contour intervals for ground slopes under ten percent.*

*ii. Five-foot contour intervals for ground slopes exceeding ten percent.*

*iii. Contours shall be related to the city or other datum approved by the city engineer.*

*c. Location and direction of all watercourses.*

*d. Natural features, such as rock outcroppings, marshes, wooded areas and isolated preservable trees.*

*e. Existing uses of the property, including location of all existing structures to remain on the property after platting.*

*4. Proposed Plan of Land Partitioning. The following information shall be included on the preliminary plat:*

*a. Proposed Streets. Location, widths, names, approximate radii of curves. The relationship of all streets to any projected streets as shown in the comprehensive plan, or if there is no complete comprehensive plan, as suggested by the city engineer.*

*b. Easements. Location on the site or abutting property, showing the width and purpose of all existing and proposed easements.*

*c. Lots. Approximate dimensions of all lots, minimum lot size, proposed lot and block numbers.*

*d. Proposed Land Use. Sites, if any, allocated for:*

*i. Multiple family dwellings;*

*ii. Shopping centers;*

*iii. Churches;*

*iv. Industry;*

*v. Parks, schools, playgrounds;*

*vi. Public or semi-public buildings.*

*e. Explanatory Information. Any of the following information that is not shown practicable on the preliminary plat may be submitted in separate statements accompanying the preliminary plat:*

*i. Proposed deed restrictions in outline form.*

*ii. Approximate center line profiles showing the finished grade of all streets as approved by the city engineer including extension for a distance of two hundred feet beyond the limits of the proposed subdivision.*

*iii. Typical cross sections of proposed streets showing widths of roadways, curbs, location and width of sidewalks, if any, and the location and size of utility mains.*

*iv. Approximate plan and profiles of proposed sanitary and storm sewers with grades and pipe sizes indicated and plan of the proposed water distribution system, showing pipe sizes and the location of valves and fire hydrants.*

v. *Plans of sewers, water lines, other utilities beyond the boundaries of the plat if connections are not available nearby.*

vi. *Drafts of all covenants to be imposed as well as any other agreements or arrangements.*

*16.12.040 Public hearing—Notice of public hearing.*

A. *Upon receipt of a preliminary plat approval, the administrator shall set a date for a public hearing before the planning commission. Notice of such hearing shall be given by publication of at least one notice not less than ten days prior to the hearing in a newspaper of general circulation within the county. Said notice shall include the date, hour and location of the hearing and a legal description of the location of the proposed subdivision and either a vicinity location sketch or a local description in non-legal language.*

B. *Additional notice of such hearing shall be given by posting a copy of the notice on the property to be subdivided, or in any manner the commission may deem necessary to notify adjacent land owners and the public. All hearings shall be public.*

*16.12.050 Public hearing—Scope and continuance—Reports.*

A. *At the public hearing the planning commission shall consider all relevant evidence to determine whether to recommend that the preliminary plat be approved or disapproved by the city council.*

B. *The planning commission shall inquire and be assured that the preliminary plat conforms to the general provisions of the comprehensive plan, planning standards and specifications, adequacy of roads, sewage disposal, water supply and fire protection, appropriate provisions for drainage, parks, schools and other public and private facilities and improvements and that the public use and interest will be served. Any hearing may be continued at the discretion of the planning commission. Any such continuance shall specify the date, time and place the hearing is to be reconvened.*

C. *The planning commission shall take prompt action in its review of the preliminary plat and shall, within ten days of their action, give written notice to the applicant of its approval or disapproval. Where approval is denied, such notice shall set forth the reasons for denial and may indicate the changes that would cause the planning commission to reconsider said plat.*

*16.12.060 Public hearing—Records.*

*Records of the planning commission hearings on preliminary plats shall be kept by the city planning commission office and shall be open to public inspection.*

*16.12.070 Public hearing—Report to city council.*

*Not later than fourteen days following conclusion of the hearing, the planning commission shall submit its written report and recommendation to the city council.*

*16.12.080 Consideration by city council.*

After receipt of the preliminary plat and the recommendation of the planning commission, the city council shall, at its next regular meeting, set the date of a public meeting, at which it will adopt or reject the recommendation of the planning commission. Should the city council elect to change the recommendation of the planning commission, it shall advertise for, and hold, its own public hearing, such hearing to be given notice in the manner specified in Section 16.12.040.

*16.12.090 Notification of subdivider.*

Upon completion of the required meeting or hearing, the city council shall inform the subdivider of the matters of import raised at this public meeting or hearing and direct him to make such changes, adjustments or revisions of the proposed plat as would appear necessary in the public interest. Where deemed necessary by the city council, any meeting or hearing may be continued to another date for the purpose of securing additional information. Public notice shall be provided for the original hearing.

*A. Approval of the preliminary plats shall be effective for three years from the date of approval by the city council during which time a final plat or plats may be submitted.*

*B. Approval of the final plat shall be in conformance with the design of an approved preliminary plat, together with any conditions of such preliminary approval.*

**FINDING:** This standard applies. Applicant has provided follow up documentation and site plan revisions to comply with the City code and Agency requests. The public process is being followed.

*Chapter 16.16 FINAL PLAT PROCEDURE*

*16.16.010 Final plat—Minimum improvements.*

Upon notification as provided in Section 16.12.090, the subdivider, prior to requesting final approval, shall elect to carry out the minimum improvements as required by Chapter 16.20 of this title by completing construction of the improvements required hereunder in accordance with those regulations and standards and to the satisfaction of the city engineer.

*16.16.020 Minimum improvements—Inspection.*

*A. As the subdivider undertakes the minimum improvements, he shall request inspection by the city engineer on four occasions. First, the clearing and grubbing stage of road construction; second, the subgrade construction; third, the ballast and top rock construction; and, fourth, the final inspection of the asphalt, or better, paving and signs. No stage of construction shall be started until the preceding stage has been inspected and approved.*

*B. After finding that all improvements have been completed in accordance with the installation standards of their respective departments, the city department heads shall submit, in duplicate, certificates approving such installations to the administrator.*

*16.16.030 Notice to proceed with final plat.*

The administrator shall retain one copy of each of the certificates required by Section 16.16.020 and shall send the other copy of each certificate to the subdivider, together with a notice authorizing him to prepare a final plat for that portion of the area contained in the preliminary plat in which the minimum improvements have been installed.

*16.16.040 Final plat—Application and approval.*

*A. The subdivider shall submit the final plat prepared in accordance with the provisions of Section 16.16.050, 16.16.060, 16.16.070 and 16.16.080 to the administrator complete with all necessary endorsements and the signatures of the owner or owners, the owner's surveyor and the county treasurer. At the same time the final plat is submitted, the subdivider shall also submit a fee of five dollars per sheet, which shall be in payment for the preparation of the necessary final copy for the county auditor and for two paper copies which shall be returned to the subdivider, and submit the recording fee in accordance with the Lewis County auditor's*

*fee list (Laws of 1959, Chapter 263). Additional copies of a filed, final plat may be acquired at the county auditor's office after the prevailing fees have been paid. The original linen, or mylar tracing~, shall become the property of Lewis County.*

*B. The administrator shall submit the final plat to the city engineer for his approval, which he shall signify by signing the original plat sheet thereof as specified in Section 16.16.080.*

*C. Upon approval of all interested departments of the city, the administrator shall approve the final plat on behalf of the planning commission and in accordance with the stipulations set down by the commission.*

*D. Upon approval of the plat by the administrator, he shall submit the plat to the city council for their acceptance or refusal. Final approval shall be given within thirty days of the filing of the application therefor with the administrator, or the plat shall be returned to the applicant for modification or correction, unless a longer period of time has been approved by the applicant in writing. If approval is withheld, the original copy of the final plat, together with a statement indicating the reasons for denial and indicating changes or modifications that would cause the city council to reconsider its action, shall be sent to the subdivider.*

*16.16.050 Final plat requirements—General.*

*A. The final plat shall be drawn in clear and permanent print on a standard sheet eighteen inches by twenty-four inches of a good quality linen tracing cloth or approved substitute and shall contain the information, certificates and statements required by this chapter. The plat scale shall be neither less than fifty feet to the inch, nor more than two hundred feet to the inch. If more than one sheet is required, the sheets shall be numbered and indexed and each sheet shall bear all certificates, approvals, descriptions and statements required.*

*B. All documents, maps and survey books shall contain the name of the subdivision, the subdivider and the name of the registered land surveyor. All signatures placed on the final plat shall be original signatures.*

*16.16.060 Requirements of the final plat—Specific.*

The final plat shall contain or be accompanied by the following information:

*A. The right-of-way lines and names of all streets or other public ways, parks, playgrounds and easements intended to be dedicated for public use, or granted for use of inhabitants of the subdivision.*

*B. The length and bearings of all straight lines, curves, radii, arcs and semi-tangents of all curves.*

*C. All dimensions along the lines of each lot, in feet and decimals of a foot to the nearest hundredth, with the true bearings, and any other data necessary for the location of any lot line in the field.*

*D. Suitable primary control points, approved by the county engineer and the descriptions and ties to such control points, to which all dimensions, angles, bearings, and similar data given on the plat shall be referred.*

*E. The locations of all permanent monuments.*

*F. The names of all subdivisions immediately adjacent to the proposed plat.*

*G. The date, north point, and scale.*

*H. The boundary of the subdivided tract, with the courses and distances marked thereon, as determined by a field survey made by a registered and qualified engineer or land surveyor of the state of Washington, and to close with an error of not more than one foot in four thousand.*

*I. The profiles of all street centerlines to the vertical scale of twenty or less feet to the inch, and horizontal scale of two hundred or less feet to the inch, submitted on a separate four by twenty plat standard profile tracing paper.*

*J. Sewer profiles to the same scale and on the same sheet as street profiles and the plan of all sanitary and/or storm intersections on a separate sheet, when the subdivider himself, or his agent, installs either sewers or water lines or both.*

*K. If the plat constitutes a replat, the lots, blocks, streets and other division of the original plat shall~ be shown by dotted lines in their proper positions in relation to the new arrangement of the plat, the new plat being so clearly shown in solid lines as to avoid any confusion or ambiguity.*

*L. Satisfactory evidence to the administrator evidencing payment, satisfaction or waiver of any or all expenses incurred in the platting, which would be a potential lien against any or all of the properties located within said plat which are dedicated.*

*M. Satisfactory evidence to show the developer has made application for franchise with city council for any community water system proposed on said plat.*

*N. All deed restrictions, protective covenants, ownership agreements, association charter, membership rules, bylaws or other agreements to be used in selling, leasing, maintaining and operating the development shall be inscribed on the face of the final plat, or additional sheets when necessary.*

*16.16.070 Title.*

*The applicant shall provide a certificate of title from a qualified title insurance company showing the ownership and title of all interested parties in the plat. The certificate shall have been issued not more than thirty days before the filing of the final plat in the records of the county.*

**FINDING:** This standard applies.

**CONDITION OF APPROVAL: Any changes alterations that result in a higher impact will require at least an amended SEPA process focused on the increased impact in question or, if significant enough, a new SEPA review for the entire project.**

*Chapter 16.20 DESIGN STANDARDS*

*16.20.010 Design standards and principles of acceptability.*

*The subdivision shall be in conformity with the comprehensive plan and shall take into consideration any preliminary studies thereof or applying thereto. The subdivision shall conform with the requirements of state laws and the standards established by this chapter.*

*16.20.020 Streets.*

*A. General. The location, width and grade of streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety and in their appropriate relation to the proposed use of the land to be served by such streets.*

*B. Minimum Right-of-Way and Roadway Widths. Unless otherwise indicated in the comprehensive plan, the width of streets and roadways shall not be less than the minimums shown in the following table:*

| | *Minimum Width in Feet* | |
|---|---|---|
| | *Right-of-Way* | *Roadway* |
| *Primary arterials* | *100* | *66* |
| *Secondary arterials* | *80* | *56* |
| *Collector streets* | *70* | *40* |
| *Other lesser streets* | *60* | *36* |
| *Cul-de-sac; radius of turnaround* | *45* | *40* |
| *Alleys* | *20* | *As required by City Engineer* |

*C. Reserve Strips. Reserve strips or street plugs controlling the access to streets will not be approved unless such strips are necessary for the protection of the public welfare or of substantial property rights or both, and in no event, unless the control and disposal of the land composing such strips is placed definitely within the jurisdiction of the city under conditions approved by the planning commission.*

*D. Alignment. Streets other than minor streets or cul-de-sacs shall, as far as practical, be in alignment with existing streets by continuations of the center lines thereof.*

*E. Future Extension of Streets. Where a subdivision adjoins unplatted acreage, streets which in the opinion of the planning commission should be continued in the event of the subdivision of such unplatted acreage will be required to be provided through to the boundary lines of the tract. Reserve strips and street plugs may be required to preserve the objectives of street extensions.*

*F. Intersection Angles. Streets shall intersect one another at an angle as near to a right angle as practical, and no intersection of streets at an angle of less than seventy-five degrees shall be approved. When intersections of other than ninety degrees are unavoidable, the right-of-way lines along the acute angle shall have a minimum corner radius of twenty-five feet. All right-of-way lines at intersections with arterial streets shall have corner radius of not less than fifteen feet.*

*G. Existing Streets. Whenever existing streets adjacent to or within a tract are of inadequate width, additional right-of-way shall be provided at the time of subdivision, and conversely, oversized rights of way may be decreased.*

*H. Cul-de-Sacs. A cul-de-sac shall be as short as possible and shall in no event be more than five hundred feet in length.*

*I. Grades and Curves. Grades shall not exceed five percent on primary or secondary arterials, ten percent on collector streets, or fifteen percent on any other street. In flat areas allowance shall be made for finished street grades having a minimum slope of three-tenths percent. Centerline radii of curves shall not be less than five hundred feet on primary arterials, three hundred fifty feet on secondary arterials, two hundred fifty feet on collector streets, and one hundred fifty feet on other streets. Grades in excess of fifteen percent may be allowed if the street is to be paved.*

*J. Marginal Access Streets. Where a subdivision abuts or contains an existent or proposed primary arterial, the planning commission may require marginal access streets, reverse frontage lots with suitable depth, screen planting contained in a non-access reservation along*

*the real property line, or such other treatment as may be necessary for ~adequate protection of residential properties and to afford separation of through and local traffic.*

K. *Alleys. Alleys shall be provided in commercial and industrial districts, unless other permanent provisions for access to off-street parking and loading facilities are made as approved by the planning commission.*

*16.20.030 Blocks.*

A. *General. The lengths, widths and shapes of blocks shall be designed with due regard to providing adequate building sites suitable to the special needs of the type of use contemplated, needs for convenient access, circulation, control and safety of street traffic, and limitations and opportunities of topography.*

B. *Sizes. Blocks shall not exceed one thousand feet in length, except blocks adjacent to primary arterials or unless the previous adjacent layout or topographical conditions justify a variation. The recommended minimum distance between intersections on primary arterials is one thousand eight hundred feet.*

C. *Easements.*

1. *Utility Lines. Easements for electric lines or other public utilities may be required. Easements for utilities shall be a minimum of ten feet in width, and centered on rear or side lot lines. Tie-back easements six feet in width by twenty feet in length shall be provided for utility poles along lot lines at change of direction points of easements.*

2. *Watercourses. Where a subdivision is traversed by a watercourse, drainage way, channel or stream, there shall be provided a stormwater easement or drainage right-of-way conforming substantially with the lines of such watercourse, and such further width as will be adequate for the purpose. Streets parallel to major watercourses may be required.*

3. *Pedestrian Ways. In any block over seven hundred fifty feet in length, a pedestrian way with a minimum width of twenty feet or combination pedestrian way and utility easement shall be provided through the middle of the block. If unusual conditions require blocks longer than one thousand feet, two pedestrian ways may be required. When essential for public convenience, such ways may be required to connect to cul-de-sacs. Long blocks parallel to primary arterials may be approved without pedestrian ways if desirable in the interest of traffic safety.*

*16.20.040 Lots.*

A. *Size and Shape. The lot size, width, shape and orientation shall be appropriate for the location of the subdivision and for the type of development and use contemplated.*

B. *Minimum Lot Sizes.*

1. *Lot sizes shall conform with the requirements of Title 17 of this code.*

2. *In areas that cannot be connected to sewer trunk line, minimum lot sizes shall be greater than the minimum herein specified, if necessary because of adverse soil structure for sewage disposal by septic tanks. Such lot sizes shall conform to the requirements of the county health department unless provisions are made for sanitary sewers.*

3. *Where property is zoned and planned for commercial or industrial use, in conformance to the intent of the comprehensive plan, other lot dimensions or areas may be permitted at the discretion of the planning commission, within the limitations of Title 17 of this code.*

*C. Lot Side Lines. The side lines of lots shall run at right angles to the street upon which the lots face, as far as practical, or on curved streets they shall be radial to the curve.*

*D. Resubdivision. In subdividing tracts into large lots which at some future time are likely to be resubdivided, the location of lot lines and other details of the layout shall be such that resubdivision may readily take place without violating the requirements of these regulations and without interfering with the orderly development of streets. Restriction of building locations in relationship to future street rights-of-way shall be made a matter of record if the planning commission considers it necessary.*

**FINDING:** This standard applies. Applicant has provided a site plan that shows utilities, streets, lot layout, and environmental constraints for Phase 1. Applicant has also shown layout for future phase 2.

*16.20.050 Determination of public use significance.*

*Before approval of the plat or subdivision the planning commission shall give consideration to appropriate provisions in the plat or subdivision for adequate streets and other public ways, parks, playgrounds, sites for schools and school grounds, and shall consider all other facts deemed by it relevant and designed to indicate whether or not the public interest will be served by the platting, subdividing or dedication.*

**FINDING:** This standard applies.

*16.20.060 Improvements.*

*A. Requirements. The following improvements shall be installed at the expense of the subdivider in accordance with city standards:*

*1. Streets;*

*2. Storm sewers, unless the area is not accessible to a trunk line within 500 feet;*

*3. Sanitary sewers, unless the area is not accessible to a trunk line within 500 feet;*

*4. Water distribution lines;*

*5. Sidewalks in any special pedestrian ways;*

*6. Street name signs and street lights;*

*7. Curbs and gutters wherever storm sewers are installed.*

*Other public improvements installed at the option of the subdivider shall be installed in conformity to city requirements.*

*B. Streets.*

*1. All streets, including alleys, within the subdivision and streets adjacent but partially within the subdivision shall be improved;*

*2. All streets shall be constructed to city standards for permanent street and alley construction. Catch basins shall be installed and connected to drainage tile leading to storm sewers or drainage ways as approved by the city engineer. Upon completion of the street improvement, monuments shall be re-established and protected in monument boxes at every street intersection and all points of curvature and points of tangency of street centerlines.*

3. *In a residential area, if the city requires a subdivider to install a street with pavement width greater than thirty-six feet to provide an arterial traffic route, the city shall pay that portion of the cost in excess of the cost of a thirty-six-foot roadway.*

C. *Surface Drainage and Storm Sewer System.*

1. *Drainage facilities shall be provided within the subdivision and to connect the subdivision drainage ways or storm sewers outside the subdivision as required by the city engineer.*

2. *Capacity, grade and materials shall be as provided by the city engineer's design. Design of drainage within the subdivision shall take into account the capacity and grade necessary to maintain unrestricted flow from areas draining through the subdivision and to allow extension of the systems to serve such areas.*

D. *Sanitary Sewers.*

1. *Sanitary sewers shall be installed to serve the subdivision and to connect the subdivision to existing mains. In the event it is impractical to connect the subdivision to the city trunk sewer system, the planning commission, in conjunction with the county sanitarian, may authorize the use of septic tanks if lot areas are adequate considering the physical characteristics of the size and the subsurface ground conditions. The septic tanks shall be of a design and capacity designated by the county sanitarian.*

2. *Size, slope and type of sewer pipe material shall be in accordance with plans and specifications of the city. The subdivider shall pay for the necessary inspection by the city. Design shall take into account the size of pipe and grade elevation to allow for desirable extension beyond the subdivision. The city will not require the subdivider to pay for the extra cost of sewer mains over eight inches in diameter or for excessive depth necessary to provide for extension beyond the subdivision.*

   *If the property that is being subdivided has never paid any sewer assessments for the availability of existing trunk sewer facilities, the subdivider will be required to pay to the city a connection charge before the proposed sewer main can be connected to the existing sewer. This charge may vary at different locations. The subdivider shall make a request to the city engineer and the water-sewer utility superintendent, as to the amount of the connection charge.*

3. *If required sewer facilities will, without further sewer construction, directly serve property outside the subdivision, the following arrangements will be made to equitably distribute the cost:*

   a. *If the area outside the subdivision to be directly served by the sewer line has reached a state of development to justify sewer installation at the time, the planning commission may recommend to the city council construction as an assessment project, with such arrangement with the subdivider as is desirable to assure financing his share of the construction.*

   b. *If the installation is not made as an assessment project, the city will pay for the extra cost of the required oversized sewer mains and excessive depth of mains necessary to provide for future extensions beyond the subdivision.*

4. *All sewers shall be designed and installed in accordance with Title 13 of this code.*

*E. Water System.*

*1. Water lines and fire hydrants serving the subdivision to city mains shall be installed.*

*2. Materials, size and location of water mains shall be in accordance with the plans and specifications of the city. The subdivider shall pay for the necessary inspection by the city. Design shall take into account provisions for extension beyond the subdivision and to adequately grid the city water system. The city will not require the subdivider to pay for the extra cost of mains over six inches in diameter.*

*3. All water systems shall be designed and installed in accordance with Title 13 of this code.*

*F. Sidewalks.*

*1. Sidewalks shall be installed in any special pedestrian ways within the subdivision. Other sidewalks may be required.*

*2. All sidewalks constructed within the subdivision shall be to city standards and at grades established by the city engineer.*

*G. Street Name Signs. Street name signs shall be installed at all intersections according to city standards.*

*H. Street Lights. Street lights shall be installed according to city standards.*

*I. Other Standards.*

*1. Curb cuts and driveway installations are not required of the subdivider, but, if installed, shall be according to city standards.*

*2. Street tree planting is not required of the subdivider, but, if planted, shall be according to city requirements and of a species compatible with the width of planting strip.*

*J. Where existing city utilities are not of sufficient capacity to supply the demands of the subdivision, the developer shall install any and all additional mains, trunk lines or connections of sufficient capacity and standard to serve the subdivision. The developer is free to make any arrangement he wishes with intervening property owners in order to share the additional~ expense. All such additional installations are subject to inspection by the proper authorities.*

**FINDING:** This standard applies.

*16.20.070 Variations and exceptions.*

*A. Hardship. Where the planning commission finds that extraordinary hardship may result from strict compliance with these regulations, it may vary the regulations so that substantial justice may be done, without the effect of nullifying the intent and purpose of the comprehensive plan or these regulations.*

*B. Large Scale Development. The standards and requirements of these regulations may be modified by the planning commission in the case of a plan and program for a complete community, neighborhood unit, a large-scale shopping center or large industrial area development, which, in the judgment of the planning commission, provides adequate public spaces and improvements for the circulation, recreation, light, air and service needs of the developed tract and its relation to adjacent areas and which also provided such covenants or other legal provisions as will assure conformity to and achievement of the comprehensive plan.*

*C Conditions. In granting variances and modifications, the planning commission may require such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements to be varied or modified.*

**FINDING:** This standard applies at discretion of the City.

**CONDITION OF APPROVAL: Applicant will provide and submit final engineering plans that meet Napavine design and engineering standards for review and approval by the City.**

*Title 17 Zoning*

*Chapter 17.20 R-2 DISTRICT*

*17.20.010 Intent.*

*It is the purpose of this district to facilitate an orderly transition from low density to higher density residential uses.*

*17.20.020 Permitted uses and structures.*

*Permitted uses and structures in the R-2 zone are as follows: all uses permitted in the R-1 district; duplexes and single-family attached units (i.e., "grannie flat") where the second unit is one-half the primary unit.*

*17.20.030 Permitted accessory uses and structures.*

*Permitted accessory uses and structures in the R-2 zone are as follows: garages or parking spaces for each dwelling unit; home occupations, noncommercial swimming pools, greenhouses, garden, tool or garbage sheds.*

*17.20.040 Conditional uses.*

*The following uses are permitted after hearing and attachment of conditions: traditional home occupations, boarding houses, professional offices, and other uses deemed by the board of adjustment to be conditional.*

*17.20.050 Permitted dimensions.*

*Permitted dimensions in the R-2 zone are as follows:*

*A. Minimum lot size, one unit, seven thousand five hundred square feet or for transfer of development (TDR) purposes; two units, ten thousand square feet; three units, twelve thousand five hundred square feet plus one thousand five hundred square feet per added unit;*

*B. Minimum lot front, forty feet;*

*C. Maximum lot cover, fifty percent;*

*D. Minimum front yard depth, fifteen feet;*

*E. Minimum side yard depth, seven and one-half feet for principal or accessory structure; fifteen feet if structure abuts a street;*

*F. Minimum rear yard depth, fifteen feet for principal structure; five feet for accessory structure;*

*G. Maximum building height, fifty feet.*

*17.20.060 Prohibited uses.*

*The following are prohibited uses for the R-2 district:*

*A. Marijuana producing.*

*B. Marijuana processing.*

*C. Marijuana retailing or marijuana retailers.*

*17.20.070 Fences, walls, and hedges.*

*A. Fences within any street setback area shall be limited to:*

*1. Forty-two inches high above adjacent grade if the fence is more than fifty percent opaque;*

*2. Forty-eight inches high above adjacent grade if the fence is fifty percent or less opaque.*

*B. Fences which are not located within any street setback area shall be limited to six feet high above adjacent grade.*

*C. No residential fence shall contain barbed wire, broken glass, electricity, or any other hazardous material or substance.*

*D. Where a legally established use exists requiring the containment of farm animals or livestock, barbed wire or an electric fence may be used; provided, that such fence is set back more than twenty feet from any public right-of-way or public property and more than three feet from any adjacent private property, and warning signs are posted consistent with NMC 17.62.070(V).*

*E. Retaining walls shall be located entirely upon private property except where required by the public works director to protect public property.*

*F. A retaining wall shall not project higher than six inches above the higher adjacent grade except when it is a structural element of a building or structure.*

*G. Retaining walls which are higher than four feet from the bottom of the footing to the top of the wall shall comply with all applicable provisions of the building code, including, but not limited to, permit requirements.*

*H. Retaining walls which serve as a structural element of any building or structure shall comply with all of the applicable provisions of the building code.*

*I. A hedge shall comply with the requirements for a fence; provided, hedges which are not located within a street setback, and do not otherwise constitute a traffic visibility obstruction on any right-of-way or alley, or any public nuisance condition, are not limited in height.*

**FINDING:** This standard applies. Proposed uses are allowed. Project can meet the standards of NMC 17.20.

**CONDITION OF APPROVAL: Final engineering plans shall comply with Chapter 17.20 NMC.**

*17.60 Miscellaneous Regulations*

*17.60.010 Visibility at intersections in residential zones.*

*A. Fences, walls or hedges up to a maximum height of six feet may be installed except:*

1. *Within the existing or zone stipulated, whichever is less, front and street side yard setback;*
2. *Within the area between two main structures with less than five feet of continuous horizontal clearance on each side of the fence, wall or hedge;*
3. *Within a twenty-foot vision clearance triangle formed by the intersection of two street rights-of-way;*
4. *Within a ten-foot vision clearance triangle formed by the intersection of an alley and street right-of-way.*

B. *Within the areas identified in subsections (A)(1) and (2), fences, walls and hedges up to a maximum height of four feet may be installed.*

C. *Within the areas identified in subsections (A)(3) and (4), fences, walls and hedges up to a maximum height of three feet may be installed, except open wire-mesh fences which may be up to a maximum of four feet.*

**FINDING:** This standard applies.

**CONDITION OF APPROVAL: Applicant shall provide final engineering plans that comply with NMC 17.60.010.**

*Chapter 17.64 Off-Street Parking and Loading*

*17.64.010 Requirements for off-street parking.*

*Off-street parking spaces under standards set forth in this chapter shall be provided for new uses in the quantities specified in this section.*

A. *Residential Uses.*

1. *One-family dwelling, two spaces;*
2. *Duplex dwelling, four spaces;*
3. *Multiple-family dwelling with sixteen or fewer dwelling units, two spaces for each dwelling unit; except in cases of housing dedicated to senior citizen housing one space for each dwelling unit;*
4. *Multiple-family dwelling with more than sixteen dwelling units, thirty-two spaces, plus one and one-half spaces for each dwelling unit in excess of sixteen; except in cases of housing dedicated to senior citizen housing one space for each dwelling unit;*
5. *Convalescent homes, homes for the children or aged, and similar residential institutions, one space for each three beds.*

**FINDING:** This standard applies. Applicant can meet this standard.

*Title 18 ENVIRONMENT*

*Chapter 18.04 Environmental Protection Act Procedures and Policies*

*18.04.010 Authority.*

*(WAC 173-806-010). Authority. The city adopts the ordinance codified in this chapter under the State Environmental Policy Act (SEPA), RCW 43.21C.120, and the SEPA rules, WAC 197-11.904.*

*This chapter contains the city's SEPA procedures and policies. The SEPA rules, WAC Chapter 197-11, must be used in conjunction with this chapter.*

*18.04.020 Definitions.*

*(WAC 173-806-175). This part contains uniform usage and definitions of terms under SEPA. The city adopts the following sections by reference, as supplemented by WAC 173-806-040:*

*197-11-700 Definitions.*
*197-11-702 Act.*
*197-11-704 Action.*
*197-11-706 Addendum.*
*197-11-708 Adoption.*
*197-11-710 Affected tribe.*
*197-11-712 Affecting.*
*197-11-714 Agency.*
*197-11-716 Applicant.*
*197-11-718 Built environment.*
*197-11-720 Categorical exemption.*
*197-11-722 Consolidated appeal.*
*197-11-724 Consulted agency.*
*197-11-726 Cost-benefit analysis.*
*197-11-728 County/city.*
*197-11-730 Decision maker.*
*197-11-732 Department.*
*197-11-734 Determination of nonsignificance (DNS).*
*197-11-736 Determination of significance (DS).*
*197-11-738 EIS.*
*197-11-740 Environment.*
*197-11-742 Environmental checklist.*
*197-11-744 Environmental document.*
*197-11-746 Environmental review.*
*197-11-748 Environmentally sensitive area.*
*197-11-750 Expanded scoping.*
*197-11-752 Impacts.*
*197-11-754 Incorporation by reference.*
*197-11-756 Lands covered by water.*
*197-11-758 Lead agency.*
*197-11-760 License.*
*197-11-762 Local agency.*
*197-11-764 Major action.*
*197-11-766 Mitigated DNS.*
*197-11-768 Mitigation.*
*197-11-770 Natural environment.*
*197-11-772 NEPA.*
*197-11-774 Nonproject.*
*197-11-776 Phased review.*
*197-11-780 Private project.*
*197-11-782 Probable.*
*197-11-784 Proposal.*
*197-11-786 Reasonable alternative.*

*197-11-788 Responsible official.*
*197-11-790 SEPA.*
*197-11-792 Scope.*
*197-11-793 Scoping.*
*197-11-794 Significant.*
*197-11-796 State agency.*
*197-11-797 Threshold determination.*
*197-11-799 Underlying government action.*

*18.04.030 General requirements.*

*A. (WAC 173-806-020). This part contains the basic requirements that apply to the SEPA process. The city adopts the following sections of WAC Chapter 197-11 by reference:*

*197-11-040 Definitions.*
*197-11-050 Lead agency.*
*197-11-055 Timing of the SEPA process.*
*197-11-060 Contents of environmental review.*
*197-11-070 Limitations on actions during the SEPA process.*
*197-11-080 Incomplete or unavailable information.*
*197-11-090 Supporting documents.*
*197-11-100 Information required of applicants.*

*B. (WAC 173-086-030). Additional Definitions. In addition to those definitions contained within WAC 197-11-700 through 197-11-799, when used in this chapter, the following terms shall have the following meanings, unless the context indicates otherwise:*

*"Department" means any division, subdivision or organizational unit of the city established by ordinance, rule or order.*

*"SEPA rules" means WAC Chapter 197-11 adopted by the Department of Ecology.*

*"Ordinance" means the ordinance, resolution or other procedure used by the city to adopt regulatory requirements.*

*"Early notice" means the city's response to an applicant stating whether it considers issuance of a determination of significance likely for an applicant's proposal, mitigated determination of nonsignificance (DNS) procedures.*

*C. (WAC 173-806-040). Designation of Responsible Official.*

1. *For those proposals for which the city is the lead agency, the responsible official shall be the city utility superintendent.*
2. *For all proposals for which the city is the lead agency, the responsible official shall make the threshold determination, supervise scoping and preparation of any required environmental impact statement and perform any other functions assigned to the lead agency or responsible official by those sections of the SEPA rules that were adopted by reference in WAC 173-806-020.*
3. *The city shall retain all documents required by the SEPA rules, WAC Chapter 197-11, and make them available in accordance with RCW Chapter 42.17.*

*D. (WAC 173-806-050). Lead Agency Determination and Responsibilities.*

1. *The department within the city receiving an application for or initiating a proposal that involves a nonexempt action shall determine the lead agency for the proposal under WAC 197-11-050 and 197-11-922 through 197-11-940; unless the lead agency has been previously determined or the department is aware that another department or agency is in the process of determining the lead agency.*

2. *When the city is the lead agency for a proposal, the department receiving the application shall determine the responsible official who shall supervise compliance with the threshold determination requirements, and if an EIS is necessary, shall supervise preparation of the EIS.*

3. *When the city is the lead agency for a proposal, all departments of the city shall use and consider, as appropriate, either the DNS or the final EIS of the lead agency in making decisions on the proposal. No city department shall prepare or require preparation of a DNS or EIS in addition to that prepared by the lead agency, unless required under WAC 197-11-600. In some cases, the city may conduct supplemental environmental review under WAC 197-11-600.*

4. *If the city or any of its departments receives a lead agency determination made by another agency that appears inconsistent with the criteria of WAC 197-11-922 through 197-11-940, it may object to the determination. Any objection must be made to the agency originally making the determination and resolved within fifteen days of receipt of the determination, or the city must petition the Department of Ecology for a lead agency determination under WAC 197-11-946 within the fifteen day time period. Any such petition on behalf of the city may be initiated by the city attorney or city council.*

5. *Departments of the city are authorized to make agreements as to lead agency status or shared lead agency duties for a proposal under WAC 197-11-942 and 197-11-944; provided, that the responsible official and any department that will incur responsibilities as a result of such agreement approve the agreement.*

6. *Any department making a lead agency determination for a private project shall require sufficient information from the applicant to identify which other agencies have jurisdiction over the proposal. (That is, which agencies require nonexempt licenses?)*

E. *(WAC 173-806-053). Transfer of Lead Agency Status to a State Agency. For any proposal for a private project where the city would be the lead agency and for which one or more state agencies have jurisdiction, the city's responsible official may elect to transfer the lead agency duties to a state agency. The state agency with jurisdiction appearing first on the priority listing in WAC 197-11-936 shall be the lead agency and the city shall be an agency with jurisdiction. To transfer lead agency duties, the city's responsible official must transmit a notice of the transfer together with any relevant information available on the proposal to the appropriate state agency with jurisdiction. The responsible official of the city shall also give notice of the transfer to the private applicant and any other agencies with jurisdiction over the proposal.*

*18.04.040 Categorical exemptions and threshold determinations.*

A. *(WAC 173-806-065). Purpose of this Part and Adoption by Reference. This part contains the rules for deciding whether a proposal has a "probable significant, adverse environmental impact" requiring an environmental impact statement to be prepared. This part also contains rules for evaluating the impacts of proposals not requiring an EIS. The city adopts the following sections by reference, as supplemented in this part:*

*197-11-300 Purpose of this part.*
*197-11-305 Categorical exemptions.*
*197-11-310 Threshold determination required.*
*197-11-315 Environmental checklist.*
*197-11-330 Threshold determination process.*
*197-11-335 Additional information.*
*197-11-340 Determination of nonsignificance (DNS).*
*197-11-350 Mitigated DNS.*
*197-11-360 Determination of significance (DS)/Initiation of scoping.*
*197-11-390 Effect of threshold determination.*

*B. (WAC 173-806-070). Flexible Thresholds for Categorical Exemptions.*

*1. The city establishes the following exempt levels for minor new construction under WAC 197-11-800(1)(b) based on local conditions:*

*a. For residential dwelling units in WAC 197-11-800(1)(b)(i), up to twenty dwelling units;*

*b. For agricultural structures in WAC 197-11-800(1)(b)(ii), up to thirty thousand square feet;*

*c. For office, school, commercial, recreational, service or storage buildings in WAC 197-11-800(1)(b)(iii), up to twelve thousand square feet and up to forty parking spaces;*

*d. For parking lots in WAC 197-11-800(1)(b)(iv), up to forty parking spaces;*

*e. For landfills and excavations in WAC 197-11-800(1)(b)(v), up to five hundred cubic yards.*

*2 Whenever the city establishes new exempt levels under this section, it shall send them to the Department of Ecology, Headquarters Office, Olympia, Washington, 98504 under WAC 197-11-800(1)(c).*

*B. (WAC 173-806-080). Use of Exemptions.*

*1. Each department within the city that receives an application for a license or, in the case of governmental proposals, the department initiating the proposal, shall determine whether the license and/or the proposal is exempt shall be final and not subject to administrative review. If a proposal is exempt, none of the procedural requirements of this chapter apply to the proposal. The city shall not require completion of an environmental checklist for an exempt proposal.*

*2. In determining whether or not a proposal is exempt, the department shall make certain the proposal is properly defined and shall identify the governmental licenses required, WAC 197-11-060. If a proposal includes exempt and nonexempt actions, the department shall determine the lead agency, even if the license application that triggers the department's consideration is exempt.*

*3. If a proposal includes both exempt and nonexempt actions, the city may authorize exempt actions prior to compliance with the procedural requirements of this chapter, except that:*

*a. The city shall not give authorization for:*

*i. Any nonexempt action;*

*ii. Any action that would have an adverse environmental impact; or*

*iii. Any action that would limit the choice of alternatives;*

*b. A department may withhold approval of an exempt action that would lead to modification of the physical environment, when such modification would serve no purpose if nonexempt action(s) were not approved; and*

*c. A department may withhold approval of exempt actions that would lead to substantial financial expenditures by a private applicant when the expenditures would serve no purpose if nonexempt action(s) were not approved.*

*C. (WAC 173-806-090). Environmental Checklist.*

*1. A completed environmental checklist, or a copy, in the form provided in WAC 197-11-960, shall be filed at the same time as an application for a permit, license certificate or other approval not specifically exempted in this chapter; except, a checklist is not needed if the city and applicant agree an EIS is required, SEPA compliance has been completed, or SEPA compliance has been initiated by another agency. The city shall use the environmental checklist to determine the lead agency and, if the city is the lead agency, for determining the responsible official and for making the threshold determination.*

*2. For private proposals, the city will require the applicant to complete the environmental checklist, providing assistance as necessary. For city proposals, the department initiating the proposal shall complete the environmental checklist for the proposal.*

*18.04.050 Categorical exemptions.*

*(WAC 173-806-180). Adoption by Reference. The city adopts by reference the following rules for categorical exemptions, as supplemented in this chapter, including WAC 173-806-070 Flexible thresholds, WAC 173-806-080 Use of exemptions, and WAC 173-806-190 Environmentally sensitive areas:*

| | |
|---|---|
| *197-11-800* | *Categorical exemptions.* |
| *197-11-880* | *Emergencies.* |
| *197-11-890* | *Petitioning DOE to change exemptions.* |
| *18.04.060* | *Agency compliance.* |

*A. (WAC 173-806-185). Purpose of this Part and Adoption by Reference. This part contains rules for agency compliance with SEPA, including rules for charging fees under the SEPA process, designating environmentally sensitive areas, listing agencies with environmental expertise, selecting the lead agency, and applying these rules to current agency activities. The city adopts the following sections by reference, as supplemented by WAC 173-806-050 through 173-806-053 this section:*

| | |
|---|---|
| *197-11-900* | *Purpose of this part.* |
| *197-11-902* | *Agency SEPA policies.* |
| *197-11-916* | *Application to ongoing actions.* |
| *197-11-920* | *Agencies with environmental expertise.* |
| *197-11-922* | *Lead agency rules.* |
| *197-11-924* | *Determining the lead agency.* |
| *197-11-926* | *Lead agency for government proposals.* |
| *197-11-928* | *Lead agency for public and private proposals.* |
| *197-11-930* | *Lead agency for private projects with one agency with jurisdiction.* |
| *197-11-932* | *Lead agency for private projects requiring licenses from more than one agency, when one of the agencies is a county/city.* |
| *197-11-934* | *Lead agency for private projects requiring licenses from a local agency, not a county/city, and one or more state agencies.* |

*197-11-936 Lead agency for private projects requiring licenses from more than one state agency.*
*197-11-938 Lead agencies for specific proposals.*
*197-11-940 Transfer of lead agency status to a state agency.*
*197-11-942 Agreements on lead agency status.*
*197-11-944 Agreements on division of lead agency duties.*
*197-11-946 DOE resolution of lead agency disputes.*
*197-11-948 Assumption of lead agency status.*

*B. (WAC 173-806-200). Fees. The city shall require the following fees for its activities in accordance with the provisions of this chapter:*

*1. Threshold Determination. For every environmental checklist the city will review when it is lead agency, the city shall collect a fee of one hundred dollars from the proponent of the proposal prior to undertaking the threshold determination. The time periods provided by this chapter for making a threshold determination shall not begin to run until payment of the fee.*

*2. Environmental Impact Statement.*

*a. When the city is the lead agency for a proposal requiring an EIS and the responsible official determines that the EIS shall be prepared by employees of the city, the city may charge and collect a reasonable fee from any applicant to cover costs incurred by the city in preparing the EIS. The responsible official shall advise the applicant(s) of the projected costs for the EIS prior to actual preparation; the applicant shall post bond or otherwise ensure payment of such costs.*

*b. The responsible official may determine that the city will contract directly with a consultant for preparation of an EIS, or a portion of the EIS, for activities initiated by some persons or entity other than the city and may bill such costs and expenses directly to the applicant. The city may require the applicant to post bond or otherwise ensure payment of such costs. Such consultants shall be selected by mutual agreement of the city and applicant after a call for proposals.*

*c. If a proposal is modified so that an EIS is no longer required, the responsible official shall refund any fees collected under subdivisions (a) or (b) of this subsection which remain after incurred costs are paid.*

*3. The city may collect a reasonable fee from an applicant to cover the cost of meeting the public notice requirements of this chapter relating to the applicant's proposal.*

*4. The city shall not collect a fee for performing its duties as a consulted agency.*

*5. The city may charge any person for copies of any document prepared under this chapter, and for mailing the document, in a manner provided by RCW Chapter 42.17.*

*C. (WAC 173-806-230). Severability. If any provision of the ordinance codified in this chapter or its applicant to any person or circumstance is held invalid, the remainder of the ordinance codified in this chapter, or the application of the provision to other persons or circumstances, shall not be affected.*

*18.04.070 SEPA and agency decisions.*

*A. (WAC 173-806-155). Purpose of this Part and Adoption by Reference. This part contains rules and policies for SEPA's substantive authority, such as decisions to mitigate or reject proposals*

*as a result of SEPA. This part also contains procedures for appealing SEPA determinations to agencies or the courts. The city adopts the following sections by reference:*

*197-11-650 Purpose of this part.*
*197-11-655 Implementation.*
*197-11-660 Substantive authority and mitigation.*
*197-11-680 Appeals.*

*B. (WAC 173-806-160). Substantive Authority.*

*1. The policies and goals set forth in this chapter are supplementary to those in the existing authorization of the city.*

*2. The city may attach conditions to a permit or approval for a proposal so long as:*

*a. Such conditions are necessary to mitigate specific probable adverse environmental impacts identified in environmental documents prepared pursuant to this chapter, and*

*b. Such conditions are in writing, and*

*c. The mitigation measures included in such conditions are reasonable and capable of being accomplished, and*

*d. The city has considered whether other local, state or federal mitigation measures applied to the proposal are sufficient to mitigate the identified impacts, and*

*e. Such conditions are based on one or more policies in subdivision (4) of this subsection and cited in the license or other decision document.*

*3. The city may deny a permit or approval for a proposal on the basis of SEPA so long as:*

*a. A finding is made that approving the proposal would result in probable significant adverse environmental impacts that are identified in a FEIS or final SEIS prepared pursuant to this chapter; and*

*b. A finding is made that there are no reasonable mitigation measures capable of being accomplished that are sufficient to mitigate the identified impact; and*

*c. The denial is based on one or more policies identified in subdivision (4) of this subsection and identified in writing in the decision document.*

*4. The city designates and adopts by reference the following policies as the basis for the city's exercise of authority pursuant to this section:*

*a. The city shall use all practical means, consistent with other essential considerations of state policy, to improve and coordinate plans, functions, programs, and resources to the end that the state and its citizens may:*

*i. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;*

*ii. Assure for all people of the state safe, healthful, productive and aesthetically and culturally pleasing surroundings;*

*iii. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;*

*iv. Preserve important historic, cultural and natural aspects of our national heritage;*

v. *Maintain, wherever possible, an environment which supports diversity and variety of individual choice;*

vi. *Achieve a high balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and*

vii. *Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.*

b. *The city recognizes that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.*

5. *When any proposal or action not requiring a decision of the city council is conditioned or denied on the basis of SEPA by a nonelected official, the decision shall be appealable to the city council. Such appeal may be perfected by the proponent or any aggrieved party by giving notice to the responsible official within ten days of the decision being appealed. Review by the city council shall be on a de novo basis.*

C. *(WAC 173-806-173). Notice<197>Statute of Limitations.*

1. *The city, applicant for, or proponent of an action may publish a notice of action pursuant to RCW 43.21C.080 for any action.*

2. *The form of the notice shall be substantially in the form provided in WAC 197-11-990. The notice shall be published by the city clerk-treasurer or county auditor, applicant or proponent pursuant to RCW 43.21C.080.*

*18.04.090 Forms.*

*(WAC 173-806-230). Adoption by Reference. The city adopts the following forms and sections by reference:*

| | |
|---|---|
| *197-11-960* | *Environmental checklist.* |
| *197-11-965* | *Adoption notice.* |
| *197-11-970* | *Determination of nonsignificance (DNS).* |
| *197-11-980* | *Determination of significance and scoping notice (DS).* |
| *197-11-985* | *Notice of assumption of lead agency status.* |
| *197-11-990* | *Notice of action.* |

*18.04.100 Using existing environmental documents.*

*(WAC 173-806-150). Purpose of this Part and Adoption by Reference. This part contains rules for using and supplementing existing environmental documents prepared under SEPA or National Environmental Policy Act (NEPA) for the city's own environmental compliance. The city adopts the following sections by reference:*

| | |
|---|---|
| *197-11-600* | *When to use existing environmental documents.* |
| *197-11-610* | *Use of NEPA documents.* |
| *197-11-620* | *Supplemental environmental impact statement — Procedures.* |
| *197-11-625* | *Addenda — Procedures.* |
| *197-11-630* | *Adoption — Procedures.* |
| *197-11-635* | *Incorporation by reference — Procedures.* |
| *197-11-640* | *Combining documents.* |

*18.04.110 Commenting.*

*A. (WAC 173-806-128). Adoption by Reference. This part contains rules for consulting, commenting, and responding on all environmental documents under SEPA, including rules for public notice and hearings. The city adopts the following sections by reference, as supplemented by this section:*

| | |
|---|---|
| *197-11-500* | *Purpose of this part.* |
| *197-11-502* | *Inviting comment.* |
| *197-11-504* | *Availability and cost of environmental documents.* |
| *197-11-508* | *SEPA register.* |
| *197-11-535* | *Public hearings and meetings.* |
| *197-11-545* | *Effect of no comment.* |
| *197-11-550* | *Specificity of comments.* |
| *197-11-560* | *FEIS response to comments.* |
| *197-11-570* | *Consulted agency costs to assist lead agency.* |

*B. (WAC 173-806-130). Public Notice.*

*1. Whenever the city issues a DNS under WAC 197-11-340(2) or a DS under WAC 197-11-360(3) the city shall give public notice as follows:*

*a. If public notice is required for a nonexempt license, the notice shall state whether a DS or DNS has been issued and when comments are due;*

*b. If no public notice is required for the permit or approval, the city shall give notice of the DNS or DS by posting the property for site-specific proposals;*

*c. Whenever the city issues a DS under WAC 197-11-360(3), the city shall state the scoping procedure for the proposal in the DS as required in WAC 197-11-408 and in the public notice.*

*2. Whenever the city issues a DEIS under WAC 197-11-455(5) or a SEIS under WAC 197-11-620, notice of the availability of those documents shall be given by:*

*a. Indicating the availability of the DEIS in any public notice required for a nonexempt license;*

*b. Posting the property for site-specific proposals;*

*c. Publishing notice in a newspaper of general circulation in the county, city or general area where the proposal is located.*

*3. Whenever possible, the city shall integrate the public notice required under this section with existing notice procedures for the city's nonexempt permit(s) or approval(s) required for the proposal.*

*4. The city may require an applicant to complete the public notice requirements for the applicant's proposal at his or her expense.*

*B. (WAC 173-806-140). Designation of Official to Perform Consulted Agency Responsibilities for the City.*

*1. The city utility superintendent shall be responsible for preparation of written comments for the city in response to a consultation request prior to a threshold determination, participation in scoping, and reviewing a DEIS.*

2. *This person shall be responsible for the city's compliance with WAC 197-11-550 whenever the city is a consulted agency and is authorized to develop operating procedures that will ensure that responses to consultation requests are prepared in a timely fashion and include data from all appropriate departments of the city*

**FINDING:** This standard applies. Applicant provided a SEPA Checklist. After reviewing the Applicant's submitted documents, the City (as the lead agency) issued a SEPA determination of MDNS. Forty-nine comments were received: 1) Washington State Department of Ecology, 2) Washington State Department of Archaeology & Historic Preservation, 3) Washington State Department of Natural Resources, 4) Lewis County Community Development, 5) U.S. Army Corps of Engineers, 6) Washington State Department of Fish and Wildlife, 7) Napavine School District 8) Squaxin Island Tribe, and 9) 41 comments from citizens. Comments are attached to this Staff Report.

As per NMC 18.04.070, the proposed development will have adverse impacts to the community, Napavine School District, and environment. These impacts are mitigatable, which led to the City's determination of Mitigated Non-Significance (MDNS). The Applicant was provided an opportunity to respond to each of the comments; when it came to the school related comments the Applicant was given the ability to respond to the school district letter and the citizen comments by topic instead of each specific comment correspondence. The Applicant did formally respond to each agency comment except the Napavine School District. The Applicant also did not provide any formal response to the citizen comments. The Applicant was given an extended time frame to do so.

The Napavine School District followed up with a Study that was provided to the City as well as the Applicant. The report demonstrates the District's current facilities are operating at or above capacity, with a deficit of approximately 7,342 square feet of permanent classroom space across all grade levels; or between 67 and 110 students during the day at the secondary level. The study concludes that Enrollment projections indicate the proposed Tiger Meadows Development could add 110 students upon completion of both phases.

To fulfill state requirements under SEPA and the subdivision statute, the District proposes a per-dwelling-unit school mitigation fee to fund the necessary facility expansions directly attributable to growth in student population from the Development. The report gave a range for mitigation fees that were just for temporary housing of students as well as including permanent classroom space.

> "Dividing the anticipated costs of housing students generated by the Development in temporary facilities (described in Section 6.1) by the 195 units for which approval is sought results in a figure of approximately $11,795 to $20,513 per SFH, not accounting for inflation. Those are the actual anticipated costs specific to the Development without including the costs of associated permanent facilities."

Follow up request from the District is a mitigation fee of $13,233.80 per single family home and $13,600.89 per multi-family home. The School District did indicate a willingness to explore a voluntary agreement as per allowed under RCW 82.02.020. Schools are "Essential Public Facilities" under SEPA allowing Napavine School District to collect a mitigation fee for the anticipated adverse impacts.

Washington State Department of Archaeology & Historic Preservation (DAHP) commented that the project area has the potential to contain archaeological resources. The project is in an area determined to be at primarily high risk of containing archaeology according to the DAHP predictive model and contains historically available fresh water sources. According to DAHP the scale of the proposed ground disturbing actions would destroy any archaeological resources present. Therefore, DAHP recommends a professional archaeological survey of the project area be conducted prior to ground disturbing activities. Applicant conducted an archaeological survey by a licensed professional for Phase 1 only that concluded the project is in an area of moderate probability for cultural resources based primarily on the property's proximity to known archaeological sites, topography, and ecological context associated with the creek that runs north-south through the project area. On-site fieldwork included a systematic pedestrian survey and subsurface investigation of areas of proposed impact. Precontact lithic materials were located during subsurface testing. A site form was submitted to the DAHP for recording and assignment of a Smithsonian Trinomial. Based on the results of the field review and the plan for residential development, archaeological oversight pursuant to Ch. 27.53 RCW, is required for the project.

**CONDITION OF APPROVAL: Prior to construction, including excavation, Applicant shall obtain, as applicable, authorization from the Army Corps of Engineers under Section 404 of the Clean Water Act. In addition, Applicant shall obtain required permits from the Washington State Department of Ecology.**

**CONDITION OF APPROVAL: All grading and filling of land must utilize only clean fill. All other materials may be considered solid waste and permit approval may be required from your local jurisdictional health department prior to filling. All removed debris resulting from this project must be disposed of at an approved site.**

**CONDITION OF APPROVAL: Applicant shall follow the recommendations from the Phase 2 Environmental Site Assessment of soil removal from effected areas. Additional soil characterization and removal may be necessary in areas that were not sampled if contamination is observed. One area of note that was noticed in the 2015 aerial images of the proposed project area, is in the northeast section of parcel #018418003000. This area shows a large quantity of stockpiled materials against the tree line with loading/unloading activity occurring in the image. Prior to the soil removal, it is recommended to review Tables 12.1 and 12.2 (pgs. 189-190) in the Guidance for Remediation of Petroleum Contaminated Sites. These tables outline and describe best management practices for the various contaminated soil categories that may be encountered. Applicant is also required to develop a contaminated media management plan prior to soil removal to ensure excavated soils are removed, stored, and disposed of appropriately. If contamination is discovered or caused during any phase of the project, it must be reported to the Washington State Department of Ecology Environmental Report Tracking System.**

**CONDITION OF APPROVAL: Prior to construction, including tree and vegetation removal, if merchantable timber is removed/harvested as part of the proposal or future development, a Forest Practices Application (FPA) will be required (Ch. 76.09 RCW and Ch. 222 WAC). The FPA will need to meet the requirements of the Forest Practices Act and rules.**

**CONDITION OF APPROVAL: Prior to construction, including excavation, Applicant shall obtain a monitoring permit through DAHP. Applicant shall also provide the City with an Incidental**

**Discovery Plan. No site disturbance is allowed on future Phase 2 without prior City land use and final civil engineering approvals for that Phase and securing all required permits.**

**CONDITION OF APPROVAL: If the City approves the proposed development, then the applicant shall mitigate impacts to the Napavine School District by doing one of the following:**

1) **Record a restrictive covenant limiting occupancy of the units to senior adults only for the life of the project;**
2) **Enter into a voluntary mitigation agreement with the Napavine School District to pay a per lot mitigation fee commensurate with its proportionate share of school impacts prior to issuance of first building permit pursuant to RCW 82.02.020.**

B. NAPAVINE PUBLIC WORKS STANDARD

*CHAPTER 2 TRANSPORTATION*

*2B Street*

*2B.01 General*

*City streets are classified as arterials, collectors and local access streets in accordance with regional transportation needs and the functional use each serves. Function is the controlling element for classification and will govern right-of-way, street width and street geometries. The Director of Public Works will determine the classification of new streets.*

*Street design must provide for the maximum loading conditions anticipated. Th width and grade of the pavement must conform to specific standards set forth herein for safety and uniformity. See Table I, Minimum Street Standards.*

*2B.02 Design Criteria*

*The design of streets and roads will depend upon their type and usage. The design elements of city streets will conform to these Standards as set forth herein and current design practices as set forth in Chapter 1.*

*The layout of streets will provide for the continuation of existing principal street in adjoining subdivisions or of their proper projection when adjoining property is not subdivided. Minor streets, which serve primarily to provide access to abutting property, will be designed to discourage through traffic. See Table I, Minimum Standards.*

***Table 1 Minimum Street Standards Minimum Street Standards.***

| DESIGN STANDARD | BOULEVARD | MAJOR OR MINOR ARTERIAL | COMMERCIAL COLLECTOR | NEIGHBORHOOD COLLECTOR | LOCAL ACCESS | PRIVATE |
|---|---|---|---|---|---|---|
| DESIGN LIMITATIONS | Access and intersections should be limited. No on-street parking. | | N/A | N/A | N/A | N/A |
| MINIMAL STRUCTURAL DESIGN | See Standard Drawing Number 2-2 | | | | | |
| STANDARD RIGHT-OF-WAY | 90'-102' | 84'-104' | 66'-78' | 60' | 60' | N/A |

| DESIGN STANDARD | BOULEVARD | MAJOR OR MINOR ARTERIAL | COMMERCIAL COLLECTOR | NEIGHBORHOOD COLLECTOR | LOCAL ACCESS | PRIVATE |
|---|---|---|---|---|---|---|
| STANDARD PAVEMENT WIDTH | 48' (may have a 16' median) | 48'-60' | 40' | 28'- 40' | 36' | 20' |
| PARKING LANE | None Allowed | None Allowed | 8' Both Sides | 7' One Side | 7' One Side | N/A |
| MINIMUM MAXIMUM GRADE | 0.5%-8.0% | 0.5%-8.0% | 0.5%-10.0% | 0.5%-12.0% | 0.5%-15.0% | 0.5%-15.0% |
| CURB | Both Sides | | | | | N/A |
| SIDEWALKS | Both Sides 6' (min) 8' - pedestrian corridor 10' - zero lot setback | | | Both Sides 5' | Both Sides 5' | One Side 5' |
| CUL-DE-SAC RADIUS (PAVEMENT WIDTH) | N/A | N/A | 50' | N/A | 47' with landscaped island and island radius of 17' | Fire Department Standards |
| INTERSECTION CURB RADIUS | 35' | 35' | 35' | 35' | 25' | 25' |
| DESIGN SPEED (MPH) | 40 | 40 | 30 | 30 | 25 | N/A |
| MINIMUM CENTERLINE RADIUS | w/ superelevation* per AASHTO w/o superelevation 600' | w/ superelevation* per AASHTO w/o superelevation 600' | 150' | 150' | 100' | N/A |
| *Maximum superelevation - 6% | | | | | | |

A. ***Alignment*** *of major arterials, minor arterials and collectors will conform as nearly as possible with that shown in the Comprehensive Plan.*

B. ***Grade****. Street grade should conform closely to the natural contour of the land. In some cases, the Director of Public Works may require a different grade. The minimum allowable grade will be 0.5 percent. The maximum allowable grade will be 8-15 percent depending on the street classification.*

C. ***Width****. The pavement and right-of-way width will depend on the street classification. Table I, Minimum Street Standards, show the minimum widths allowed.*

*The General Notes on the following page will be included on any plans dealing with street design in addition to all other applicable requirements*

*1. All workmanship and materials will be in accordance with City of Napavine Standards and the most recent edition of the State of Washington Standard Specifications for Road, Bridge and Municipal Construction.*

*2. The contractor will be responsible for all traffic control in accordance with MUTCD. Prior to disruption of any traffic, traffic control plans must be prepared and submitted to the city of approval. No work will commence until all approved traffic control plans are in place.*

*3. All curb and gutter, street grades, sidewalk grades and any other vertical and/or horizontal alignment, will be staked by an engineering or surveying firm capable of performing such work.*

*4. Where new asphalt joins existing, the existing asphalt will be cut to a neat vertical edge and tacked with Asphalt Emulsion type CSS-1 in accordance with the Standard Specifications. The new asphalt will be feathered back over existing to provide for a seal at the saw cut location and the joint sealed with grade AR-4000W paving asphalt.*

*5. Compaction of sub grade inspection, rock and asphalt will be in accordance with Standard Specifications.*

*6. Form and sub grade inspection by the Public Works Department 1 required before pouring concrete. Twenty-four hours (one workday) advance notice is required for form Inspection.*

*7. Testing and sampling frequencies are described in these Standards.*

*8. The Public Works Department will install or oversee the installation of street name and regulatory signs at the contractor's and/or the developer's expense. All street name and regulatory signs will be requested and approved by the city prior to the start of construction.*

*2B.04 Signing and Striping*

*Street signs are defined as any regulatory, warning, or guide signs. The developer is responsible for the cost of all street signs. Street sign will comply with the latest edition of the U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD).*

*Pavement markings and street signs, including poles and hardware, will be paid for by the developer, but will be designed. furnished and installed by the city or by the developer under the city's direction, to establish and maintain uniformity. The Public Works Department will determine whether pavement markings and street signs will be provided by the city or by the developer. If the work is to be performed by the city, the developer must submit a written request to Public Works and, the developer will then be billed upon completion of the work.*

*2B.05 Right-of-Way*

*Right-of-way width is determined by the functional classification of a street. Refer to Table 1, Minimum Street Standards.*

*Right-of-way requirements may be increased if additional lanes, pockets, transit lanes, bus loading zones, operational speed, bike lanes, utilities, or other factors are required as determined by the Director of Public Work.*

*Right-of-way shall be conveyed to the city on a recorded plat or by a right-of-way dedication deed.*

**FINDING:** These standards apply. Applicant has the ability to comply with 2B.01-2B.05.

**CONDITION OF APPROVAL: Prior to final engineering approval, project specific street designs are required to be submitted for review and approval by the City.**

*2B.06 Private Streets*

**FINDING:** The proposal does not provide private streets. This standard does not apply.

*2B.07 Street Frontage Improvements*

*A. All commercial and residential (including multi-family) development, plats, and short plats will install street frontage improvements at 'he time of construction as required by the Public Works Department. Such improvements may include curb and gutter; sidewalk; street; storm drainage; street lighting system; traffic signal modification, relocation or installation; utility relocation; landscaping and irrigation; and street widening per these Standards. Plans will be prepared and signed by a licensed civil engineer registered in the State of Washington.*

*B. All frontage improvements will be made across full frontage of property and on all sides that may border a city right-of-way.*

*C. Exceptions. See Chapter 1, Section 1.07 "Exceptions".*

**FINDING:** This standard applies. The Applicant's site plan does provide street frontage improvements for Phase 1.

**CONDITION OF APPROVAL: Applicant will be required to install street frontage improvements to the city of Napavine's standards. Street frontage design shall be submitted with final civil engineering for review and approval by the city of Napavine.**

*2B.08 Cul-de-sac*

*Streets designed to have one end permanently closed will be no longer than 400 feet. At the closed end, there will be a widened "bulb" having a minimum paved traveled radius as shown in Table 1, Minimum Street Standards.*

**FINDING:** These standards apply. Applicant has the ability to comply with 2B.08.

**CONDITION OF APPROVAL: Prior to final engineering approval, street designs are required to comply with 2B.08 and be submitted for review and approval by the City.**

*2B.11 Intersections*

*A. Traffic control will be as specified in the most recent edition, of the MUTCD or as modified by the Director of Public Works as a result of appropriate traffic engineering studies.*

*B. Street intersections will be laid out to intersect as nearly as possible at right angles. Sharp angled intersections will be avoided. For reasons of traffic safety, a "T" intersection (three-legged) is preferable to the crossroad (four-legged) intersection for local access streets. For safe design, the following types of intersection features should be avoided:*

*1. Intersections with more than four intersecting street*

*2. "Y" type intersections where streets meet at acute angles*

*3. Intersections adjacent to bridges and other sight obstructions*

*4. Offset intersections that are not conducive to side traffic flow*

*In no case will the angle of the intersection be less than 60 degrees nor greater that 120 degrees. The preferred angle is 90 degrees.*

*C. Spacing between adjacent intersecting streets, whether crossing or "T." should be as follows:*

| *When highest classification involved is:* | *Minimum centerline offset should be:* |
|---|---|
| *Major Arterial* | *350 feet* |
| *Minor Arterial* | *300 feet* |
| *Commercial Collector* | *200 feet* |
| *Neighborhood Collector* | *200 feet* |
| *Local Access* | *150 Feet* |

*When different classes of streets intersect, the higher standard will apply on curb radii. Deviations may be allowed at the discretion of the Director of Public Works.*

*D. On sloping approaches at an intersection, landings will be provided with a grade not to exceed a one-foot difference in elevation,1 a distance of 30 feet approaching any arterial, or 20 feet approaching a collector or local access street, measured from the nearest right-of-way line (extended) of intersecting street.*

**FINDING:** These standards apply. Applicant has the ability to comply with 2B.11.

**CONDITION OF APPROVAL: Prior to final engineering approval, street designs are required to comply with 2B.11 and be submitted for review and approval by the City.**

*2B.12 Driveways*

*A. All abandoned driveway areas on the same frontage will be removed and the curbing and sidewalk or shoulder and ditch section will be properly restored.*

*B. All driveways will be constructed of Portland Cement Concrete (CC) or asphalt from the right-of-way line to the edge of the street. The Director of Public Works will make the acceptable driveway material determination. PCC driveways will be subject to the same testing and inspection requirements as curb, gutter, and sidewalk construction. Residential PCC driveways will have a nominal concrete thickness of six (6) inches. All other PCC approaches will be eight (8) inches thick.*

*C. Joint-use driveways serving two adjacent parcels may be built on their common boundary with a formal written agreement between both property owners and with the approval of the city. The agreement will be a recorded easement for both parcels of and specifying joint usage.*

*D. Grade breaks, including the tie to the roadway, will be constructed as smooth vertical curves. The maximum change in driveway grade will be eight (8) percent within any ten (10) feet of distance on a rest and twelve (12) percent within any ten (10) feet of distance in a sag vertical curve.*

*E. No commercial driveway will be approved where backing onto the sidewalk or street would occur.*

*F. Driveways will be separated by twenty (20) feet of straight curb between each driveway providing access to a parcel or parcel of land under common ownership or occupancy unless otherwise allowed by the Director of Public Works.*

*G. No driveway will be built within fifteen (15) feet of the end of any curb return or within five (5) feet of any property line unless otherwise allowed by the Director of Public Works.*

*H. Driveway Widths*

*1. The maximum driveway width for a single driveway onto an arterial or collector will be:*

| Frontage Width | Residential | Commercial | Industrial |
|---|---|---|---|
| Up to 50 feet | 24 feet | 24 feet | 24 feet |
| 50 to 75 feet | 24 feet | 30 feet | 30 feet |

| | | | |
|---|---|---|---|
| More than 75 feet | 30 feet | 30 feet | 35 feet |

*2. The maximum driveway width for each of two driveways onto an arterial or collector will be:*

| Frontage Width | Residential | Commercial | Industrial |
|---|---|---|---|
| Up to 50 feet | not permitted | not permitted | not permitted |
| 50 to 75 feet | 20 feet | 20 feet | 24 feet |
| More than 75 feet | 20 feet | 24 feet | 24 feet |

*3. The maximum driveway width for a single driveway onto a local access street will be:*

| Frontage Width | Residential | Commercial | Industrial |
|---|---|---|---|
| Up to 50 feet | 24 feet | Not permitted | not permitted |
| 50 to 75 feet | 24 feet | 26 feet | not permitted |
| More than 75 feet | 24 feet | 26 feet | not permitted |

*4. The maximum driveway width for each of two driveways onto a local access street will be:*

| Frontage Width | Residential | Commercial | Industrial |
|---|---|---|---|
| Up to 50 feet | not permitted | not permitted | not permitted |
| 50 to 75 feet | 20 feet | 20 feet | not permitted |
| More than 75 feet | 20 feet | 24 feet | not permitted |

*5. The maximum driveway width for one-way driveways will be:*

| Frontage Width | Residential | Commercial | Industrial |
|---|---|---|---|
| Up to 50 feet | 14 feet | 22 feet | 22 feet |
| 50 to 75 feet | 14 feet | 22 feet | 22 feet |
| More than 75 feet | 14 feet | 22 feet | 22 feet |

*6. A road approach or wider driveway may be approved by the Director of Public Works when a substantial percentage of oversized vehicle traffic exists, when divisional islands desired, or when multiple exit or entrance lanes are needed.*

*I. Arterial Street Access*

1. *No driveway may access an arterial street within seventy-five (75) feet (measured along the arterial) of any other such access to the street: on either side of the travel way but may be allowed at locations directly opposite another point of access.*
2. *No driveway access will be allowed to an arterial street within 150 feet of the nearest right-of-way line of an intersecting street.*
3. *Within the limitations set forth above, access to arterial streets within the city will be limited to one driveway for each tract of property separately owned. Properties contiguous to each other and owned by the same person are considered to be one tract.*
4. *Driveways giving direct access onto arterials may be denied if alternate access is available. The Director of Public Work may permit deviations from this requirement if sufficient justification is provided.*
5. *Road approaches and/or ingress and egress tapers may be required in industrial and commercially zoned areas as directed by the Director of Public Works. Tapers will be designed, per the most recent edition, "Transportation and Land Development" by V.G. Stover and F. Koepke.*

**FINDING:** This standard applies. Applicant has the ability to comply with 2B.12.

**CONDITION OF APPROVAL: Applicant's final civil engineering plans shall comply with Engineering Standard 2B.12 and be submitted for City review and approval.**

*2B.13 Sight Obstruction*

*The following sight clearance requirements take into account the proportional relationship between speed and stopping distance.*

*The sight distance area is a clear-view triangle formed on all intersections by extending two lines of specified length (A) and (B) as shown in this section, Uncontrolled Intersection, from the center of the intersecting streets along the centerlines of both streets and connecting those endpoints to form the hypotenuse of the triangle. Refer to Standard Drawing 2-1 at the end of this Chapter. The area within the triangle will be subject to said restrictions to maintain a clear view on the intersection approaches.*

*Sight Distance Triangle:*

*A. Stop or Yield Controlled Intersection. Providing adequate sight distance from a street or driveway is one of the most important considerations to ensure safe-street and driveway operation the Intersection Sight Distance criteria given in the following table is based on line 8-1 shown in Figure IX-40 of "A Policy on Geometric Design of Highways and Streets" published by AASHTO. This table applies to all intersections as well as driveways with an ADT greater than 20. For driveways with an ADT of 20 or less, the Stopping Sight Distance in Table 1/1-1 of the MSHTO publication can be used.*

| Operating Speed (MPH) | Intersection Sight Distance 2 Lanes | Sight Distance Intersection Sight Distance 4+ Lanes | Stopping Sight Distance |
|---|---|---|---|
| 20 | 210 | 230 | 125 |
| 25 | 255 | 280 | 150 |
| 30 | 310 | 340 | 200 |
| 35 | 355 | 390 | 250 |
| 40 | 410 | 450 | 325 |

*Other factors such as vertical and horizontal curves and roadway grades also need to be taken into account. Such factors can require necessary modification to the intersection sight distance given in the above table.*

*Sight distance is measured from a point on the minor road or driveway fifteen (15) feet from the edge (extended) of the major road pavement (or nearest traffic lane if parking is permitted) and from a height of 3.50 feet on the minor road to a height of object of 4.25 feet on the major road.*

*B. Uncontrolled Intersection*

| Operating Speed (MPH) | Sight Distance Major Street (A) | Minor Street (B) |
|---|---|---|
| 20 | 90 | 90 |
| 25 | 110 | 110 |
| 30 | 130 | 130 |
| 35 | 155 | 155 |
| 40 | 180 | 180 |

*C. Vertical Clearance. The area within the sight distance triangle will be free from obstructions to a motor vehicle operator's view between a height of two and one half (2.5) feet and ten (10) feet above the existing surface of the street.*

*D. Exclusions. Sight obstructions that may be excluded from these requirements include; fences in conformance with this chapter, utility poles, regulatory signs, trees trimmed from the base to a height of ten (10) feet above the street, places where the contour of the ground is such that there can be no cross visibility at the intersection, saplings or plant species open growth habits and not in the form of a hedge that are so planted and trimmed as to leave a clear and unobstructed cross view during all seasons, buildings constructed in conformance with the provisions of appropriate zoning regulations and pre-existing buildings.*

**FINDING:** The submitted Application does include required sight clearance information. This standard applies.

**CONDITION OF APPROVAL: Prior to engineering approval, the plans shall show the sight distance area as a clear-view triangle formed on all intersections by extending two lines of specified length.**

*2B.14 Surfacing Requirements*

*The following are the surfacing requirements for each application listed.*

*A. Asphalt Pavements. The minimum pavement sections listed in Standard Drawing 2-2 are in lieu of pavement design and are based on a subgrade California Bearing Ratio (CBR) value of three (3). Alternate pavement designs will be accepted based on soil test to determine the actual CSR value and completion of the worksheet on Standard Drawing 2-3 at the end of this chapter. Soil tests and a completed worksheet for each road classification will accompany plans submitted if other than the structures shown below pavement sections in Standard Drawing 2-2 are used. One sample per each 500 LF of centerline, with a minimum of three (3) per project, representative of the roadway subgrade, will be taken to determine a statistical representation of the existing soil conditions.*

*An engineering firm that specializes in soils analysis will perform the soil tests. The report, signed and stamped by a professional engineer licensed by the State of Washington, must be based on actual soils tests and submitted with the plans. All depths indicated are a minimum compacted depth.*

*Existing pavement restoration: for utility or street widening projects requiring restoration of existing pavement, additional information and design calculations will be required to ensure*

*that the pavement will need minimal maintenance for five to seven years. The information required may include:*

1. *Pavement cores representative of typical pavement sections; and*
2. *statement of existing pavement condition and discussion of how 1 it will "match up" to the new pavement section.*

*B. Sidewalks*

1. *Surfacing: four (4) inches Commercial Concrete*
2. *Base: two (2) inches Crushed Surfacing Top Course or well graded sand*
3. *Asphalt sidewalks will not be permitted unless otherwise approved by the Director of Public Works*

*C. Concrete Driveway*

1. *Surfacing: six (6) inches Commercial Concrete for residential, eight (8) inches Commercial Concrete for all others*
2. *Base: two (2) inches Crushed Surfacing Top Course or well graded sand*

*D. Asphalt Driveway*

1. *Surfacing: three (3) inches Class B asphalt concrete for residential, six (6) inches Class B asphalt concrete for all others*
2. *Base: four (4) inches ballast*

*2B.15 Pavement Restoration*

*Trench cuts in roadways greatly degrade the condition of the pavement as well as reduce its design life. The most significant damage can be seen in newer pavements. Pavement restoration should result in the pavement being as good as, or better than, the pre-trench cut condition. This can be achieved by the prevention of trench cuts, thorough utility coordination, and high-quality. pavement restoration.*

*A. Trench Cuts in New Pavements. Trench cuts are not permitted in pavements that have been constructed or rehabilitated within five (5) years. "Rehabilitation" includes all surface treatments such as chip seal slurry seal, and asphalt overlay.*

*If there is no other option but. to cut into new pavement, prior approval will be obtained from the Director of Public Works. Pavement must then be restored in accordance with the following standards.*

*B. Transverse Utility Crossings must be bored or completed by another trenchless method. Bore pits must be restored in accordance with the following standards.*

*C. Pavement Restoration Requirements. Trench cuts, bore holes, and miscellaneous pavement repairs will be made in accordance with Standard Drawings 2-5 and 2-6, at the end of this cha ter. Pavement will be restored across the entire lane. In addition, the patch will be made perpendicular to the closest affected road edge with a single, straight, continuous cut along the entire width of the required restoration. Minimum restoration width is five (5) feet.*

*D. Lane Width Restoration Requirements. For longitudinal utility trench cuts in pavements over five years old, a minimum two-inch overlay or full-depth pavement reconstruction is required for the following widths: One-lane overlay or reconstruction – When trench cut or patch is within one travel lane.*

1. *One-lane overlay or reconstruction - When trench cut or pitch is within one travel lane.*
2. *Two-lane overlay or reconstruction - When trench cut or pitch is within two travel lanes.*

3. *Additional overlay or reconstruction - When the remaining pavement area to the edge of existing pavement on either side is less than one travel lane. No longitudinal joints will be allowed in the wheel path.*

   *All trench and pavement cuts will be made uniformly by wheel or saw cutting. The cuts will be a minimum of one-foot outside the trench width. If the edge of the trench line degrades, ravels or is non-uniform, additional saw cutting will be required prior to final patch or paving.*

   *All trenching will be backfilled with crushed surfacing material Is conforming to Section 4-04 of the most recent edition of WSDOT/APWA Standard Specifications. The subgrade will be compacted to 95 percent maximum density, as described in Section 2-03 of the WSDOT/APWA Standard Specifications.*

   *All granular backfill material will conform to Section 9-03.19 of the current edition of the WSDOT/APWA Standard Specifications. If the existing material is determined by the city to be suitable for backfill, the contractor may use the native material except that the top eight (8) inches of trench will be 2-1/2 inch minus ballast. All trench backfill materials will be compacted to 95 percent density.*

   *When the trench width is eighteen (18) inches or less and is within the travel-way, the trench will be backfilled with control density fill (CDF) Class B, as defined by the Washington Aggregates and Concrete Association. The aggregate will be 3/8-inch minus. CDF may be required in wider trenches within the travel-way if site conditions dictate.*

   *Backfill placement and compaction will be performed in six (6) inch lifts.*

   *Replacement of the asphalt concrete or Portland Cement Concrete will conform to the most current edition of the WSDOT/APWA Standard Specifications.*

E. *Tack Coat. Tack will be applied to the existing pavement along the edge of cut and will be emulsified asphalt grade CSS-1 as specified in the most recent edition of the WSDOT/APWA Standard Specifications. Tack coat will be applied as identified in Section 5-04 of the most recent WSDOT/APWA Standard Specifications.*

F. *Asphalt Concrete Class B. Asphalt concrete Class B will be placed on the prepared surface by an approved paving machine and will be in accordance with the applicable requirements of Section 5-04 of the most recent edition of the WSDOT/APWA Standard Specifications, except that longitudinal joints between successive layers of asphalt concrete will be displaced laterally a minimum of twelve (12) inches, unless otherwise approved by the Director of Public Works. Fine and coarse aggregate will be in accordance with Section 9-03.8 of the WSDOT/APWA Standard Specifications. Asphalt concrete over two (2) inches thick will be placed in equal lifts not to exceed two (2) inches each.*

   *The preferred means of connection to existing asphalt at the centerline, lane edges, and overlay ends is through grinding. Grinds can be a few inches off centerline to avoid existing stripping. Feathering may be used when grinding is not feasible, with the approval of the Director of Public Works. The affected surfaces within the trenching area will be feathered and shimmed to an extent that provides a smooth riding connection and expeditious drainage flow for the newly paved surface.*

   *Surface smoothness will be per Section 5-04 of the most recent edition of WSDOT/APWA Standard Specifications. The paving will be corrected by removal and repaving of the trench only.*

   *Asphalt concrete pavement for wearing course. will not be placed on any travel-way between October 15 and April 1 without written approval of the Director of Public Works.*

*Asphalt for prime coat will not be applied when the temperature is lower than 50 degrees Fahrenheit without written approval of the Director of Public Works.*

G. *Final Patch. The final patch will be completed as soon as possible but-no later than 30 calendar days after the trench is first opened. Time extensions due to inclement weather or other adverse conditions will be evaluated on a case-by-case basis. However, any delays must have prior approval of the Director of Public Works.*

H. *Staking. All surveying and staking will be performed by an engineering or surveying firm licensed by the State of Washington and capable of performing such work.*

*A pre-construction meeting will be held with the Public Works Department prior to commencing staking. All construction staking will be inspected by the Public Works Department prior to construction.*

*The minimum staking of curb, gutter and sidewalk will be as follows:*

1. *Stake centerline alignment every 25 feet (50 feet in tangent sections) with cuts and/or fills to subgrade.*
2. *Stake top of ballast and top of crushed surfacing at centerline and edge of pavement every 25 feet.*
3. *Stake top back of curb at a consistent offset for vertical and horizontal alignment every 25 feet (50 feet in tangent sections).*
4. *Staking will be maintained throughout construction.*

I. *Testing. Testing will be required at the developer's or contractor's expense. The developer or contractor is responsible to order all required testing. The testing lab will be approved by the Public Works Director prior to the commencement of any testing. Testing will be done on all materials and construction as specified in the WSDOT/APWA Standard Specifications and with the frequency as specified herein.*

*In addition, the Public Works Department will be notified before each phase of street construction commences (i.e., staking, grading, subgrade ballast, base top course, and surfacing). A minimum of two (2) business days advance notice is required before the start of each phase. All test results and documentation will be submitted to the Public Works Department prior to final approval of the project.*

City of Napavine

**TESTING AND SAMPLING FREQUENCY GUIDE**

| *ITEM* | *TYPE OF TESTS* | *MINIMUM NO.* | *FREQUENCY* |
|---|---|---|---|
| GRAVEL BORROW | GRADING & SE. | 1 EACH | 1-4,000 TON |
| SAND DRAINAGE BLANKET | GRADING | 1 EACH | 1-4,000 TON |
| CSTC | GRADING, SE & FRACTURE | 1 EACH | 1-2,000 TON |
| CSBC | GRADING, SE & FRACTURE | 1 EACH | 1-2,000 TON |
| BALLAST | GRADING, SE & DUST RATIO | 1 EACH | 1-2,000 TON |
| BACKFILUSAND DRAINS | GRADING | 1 EACH | 1-2,000 TON |
| GRAVEL BACKFILL FOR: | | | |
| FOUNDATIONS | GRADING, SE & DUST RATIO | 1 EACH | 1-1,000 TON |
| WALLS | GRADING, SE & DUST RATIO | 1 EACH | 1-1,000 TON |
| PIPE BEDDING | GRADING, SE & DUST RATIO | 1 EACH | 1-1,000 TON |

| | | | |
|---|---|---|---|
| DRAINS | GRADING | 1 EACH | 1-100 TON |
| PCC STRUCTURES: (Sidewalk. curb and gutter, foundations) | | | |
| COARSE AGGREGATE | GRADING | 1 EACH | 1-1,000 TON |
| FINE AGGREGATE | GRADING | 1 EACH | 1-500 TON |
| CONSISTENCY | SLUMP | 1 EACH | 1 -100 CY |
| AIR CONTENT | AIR | 1 EACH | 1 -100 CY |
| CYLINDERS (28 DAY) | COMPRESSIVE STRENGTH | 2 EACH | 1 -100 CY |
| CEMENT: | CHEMICAL & PHYSICAL CERTIFICATION | 1 | 1-JOB |
| ASPHALT CEMENT CONCRETE: | | | |
| BLEND SAND | SE | 1 EACH | 1-1,000 TON |
| MINERAL FILLER | S.G. & Pl, CERTIFICATION | 1 | 1-JOB |
| COMPLETED MIX | FRACTURE, SE, GRADING | 1 EACH | 1-1,000 TON |
| | ASPHALT CONTENT | 2 EACH | 5-400 TON |
| | COMPACTION | | |
| ASPHALT TREATED BASE: | | | |
| COMPLETED MIX | SE, GRADING | 1 EACH | 1 - 1,000 TON |
| | ASPHALT CONTENT | 1 EACH | 5 - Control LOT |
| | COMPACTION | | |
| ASPHALT MATERIALS | CERTIFICATION | 1 | 1-JOB |
| RUBBERIZED ASPHALT | CERTIFICATION | 1 | 1-JOB |
| COMPACTION TESTING: | | | |
| EMBANKMENT | COMPACTION | 1 EACH | 1- 500 LF |
| CUT SECTION | COMPACTION | 1 EACH | 1-500 LF |
| CSTC | COMPACTION | 1 EACH | 1-500 LF |
| CSBC | COMPACTION | 1 EACH | 1-500 LF |
| BALLAST | COMPACTION | 1 EACH | 1-500 LF |
| TRENCH BACKFILL | COMPACTION | 1 EACH | 1-500 LF |

SE=Sand Equivalency

*A control lot will be a normal day's production. For minor quantities 200 tons or less per day. A minimum of two (2) gauge readings will be taken.

**FINDING:** This standard applies.

**CONDITION OF APPROVAL: Prior to engineering approval, the final Site Plan shall show pavement restoration for review and approval.**

*2C Sidewalks, Curbs and Gutters*

*2C.01 General*

*Sidewalks are to be installed as designated in Chapter 1. Sidewalks re to be constructed along all streets that abut the property. Curbs and gutters will also be included with such sidewalk construction. unless otherwise authorized by the Director of Public Works. Sidewalks will be designed to accommodate any necessary traffic control signs while still providing a minimum five (5) foot unobstructed walking area.*

*Typical sidewalk, curb, and gutter location will be at the edge of proposed or existing pavement. The sidewalk will be aligned in a relatively straight configuration and make smooth transitions around curves and corners. Alternate locations may be proposed, including the incorporation of*

*painting and planting strips, upon review and approval of the Director of Public Works. Where specific site conditions dictate, the Public Works Director may require alternate locations and alignments.*

*The owner of the property that abuts a sidewalk is responsible for all repair, maintenance, and upkeep of said sidewalk. The city is riot liable for any damage or injuries caused by a sidewalk in need of repair. CMG 12.40.020)*

*2C.02 General design criteria*

*Plans for construction of sidewalks, curbs and gutters are to be submitted as part of the street plans when applicable.*

*The City has set forth minimum standards that must be met in the design and construction of sidewalks, curbs, and gutters. Because these are minimum standards, the Director of Public Works may modify them should it be deemed necessary.*

A. *Sidewalks will be constructed of Commercial Concrete four (4) inches thick except in a driveway section at which point the concrete thickness must me.et driveway standards. The minimum of sidewalk will be five (5) feet. When the sidewalk, curb and gutter are contiguous the width of the sidewalk will be measured from the back of the curb and gutter to the back of the sidewalk. In commercial areas, sidewalks may be required to extend from the curb to the property line.*

B. *Arterial Streets. Sidewalks, curbs, and gutters will be required on both sides of arterial streets interior to the development. Sidewalks, curbs, and gutters will also be required on the development side of arterial streets abutting the exterior of said development.*

C. *Local Access Streets. Sidewalks, curbs, and gutters will be required on both sides of local access streets interior to the development. Sidewalks, curbs, and gutters will also be required on the development side of local access streets abutting the exterior of said development including cul-de-sacs.*

D. *Design and Construction. The design and construction of sidewalks, curbs, gutters, and walkways will meet the following minimum standards:*
    1. *The width of sidewalks will be as shown in the street design drawings. Design of all sidewalks will provide for a gradual rather than an abrupt transition between sidewalks of different widths or alignments.*
    2. *Form and subgrade inspection by the Public Works Department is required before the sidewalk is poured.*
    3. *Monolithic pour of curb, gutter and sidewalk will not be all wed without specific approval from the Director of Public Works..*

E. *Driveways - see Section 2B.12.*

F. *Curbs and Gutters. Cement concrete curbs and gutters will be used for all street edges unless otherwise approved by the Public Works Director. All curbs and gutters will be constructed in accordance with Standard Drawing 2-7.*

G. *The face or top of all new curbs will be embossed ¼-inch into the cement to denote the location of water and sewer service crossings. Water services will be marked with a "W" and side-*sewers will be marked with an "S". The markings will be at least three (3) inches in height and clearly legible.

*H. Access Ramps. Sidewalks will be constructed to provide for access ramps in accordance with State Law, Access ramps will be constructed of Commercial Concrete. Form and sub-grade inspection by the Public Works Department is required before the access ramp is poured.*

*2C.03 Staking*

*All surveying and staking will be performed by an engineering or surveying firm licensed by the State if Washington and capable of performing such work.*

*A pre-construction meeting will be held with the Public Works Department prior to commencing staking. All construction staking will be inspected by the Public Works Department prior to construction.*

*The minimum staking of curb. gutter and sidewalk will be as follows: take top back of curb at a consistent offset for vertical and horizontal alignment every 25 feet (50 feet in tangent sections).*

*2C.04 Testing*

*Testing will be required at the developer or contractor's expense on all materials and construction as specified in the most recent edition of WSDOT/APWA Standard Specifications.*

*At a minimum, one slump test and two (2) test cylinders will be taken nee per day. All other testing frequencies will be as specified in the Testing and Sampling Frequency Guide, contained herein. In addition, the city will be notified before each phase of sidewalk: curb and gutter construction commences.*

**FINDING:** This standard applies.

**CONDITION OF APPROVAL: Prior to engineering approval, the Applicant shall submit sidewalk, curb, and gutter designs for review and approval.**

*2D Illumination*

*2D.01 General*

*New commercial or residential subdivisions, short plats or property development along the locations designated in Chapter 1 will provide streetlights in accordance with these Standards for such improvements of the city and they will be owned and operated by the city.*

*2D.02 Design Criteria*

*A street lighting plan submitted by the applicant and approved by the Director of Public Works will be required for all streetlight installations. Type of installation will be as set forth in the most recent edition of the WSDOT/APWA Standard Specifications, Illumination Standards Table in this chapter, and as directed by the city.*

*All public streetlight designs will be prepared by an engineering licensed by the State of Washington, and capable of performing such work. All developments will submit the lighting plan on a separate plan sheet. After the system is completed and approved, a set of "as-built" mylars will be submitted to the city as a permanent record.*

*Streetlights will be located in accordance with the design criteria contained herein, and as approved by the Director of Public Works. In addition, intersections will be illuminated to 1.5 times the highest foot-candle requirement of the streets surrounding the intersection. Exception:*

*In residential and intermediate classes, local and collector streets intersecting other local and collector streets will not be subject to the 1.5 times illumination factor provided a luminaire is placed at the intersection. Energy efficient fixtures will be incorporated into the streetlight system whenever practical. Poles will be opposite across the roadway or on one side of the roadway. Staggered spacing will be allowed if the roadway width is such that adequate light levels cannot be provided with a one-side or opposite/both-sided pattern.*

*For the purposes of this section, area classes are determined by zoning as follows:*

*Commercial*

*Multi-family, high density Central business district Freeway commercial General commercial Neighborhood commercial*

*Industrial*

*Heavy industrial*

*Light industrial*

*Intermediate*

*Essential public facilities*

*Commercial office/mixed use*

*Residential*

*Single family, low density.*

*Single family, medium density*

*Multi-family, medium density*

*As new zones are created the Director of Public Works will classify them. The following criteria will be used to determine streetlight spacing:*

| AVERAGE MAINTAINED HORIZONTAL ILLUMINATION (FOOT CANDLES) | | | | |
|---|---|---|---|---|
| ROAD CLASS | AREA CLASS | | | |
| | Residential | Intermediate | Industrial | Commercial |
| Local | 0.2 | 0.6 | N/A | N/A |
| Collector | 0.5 | 0.7 | 0.8 | 0.9 |
| Arterial | 0.7 | 1 | 1.2 | 1.4 |
| Boulevard | 0.7 | 1 | 1.2 | 1.4 |

*Uniformity ratio:* *6:1 average: minimum for local*
*4:1 average: minimum for collector*
*3:1 average: minimum for arterial and boulevard*

*Dirt Factor: 0.85*

*Lamp Lumen Depreciation Factor: 0.73*

*Weak Point Light: 0.2 fc (except local residential street)*

*Line loss calculations will show no more than a 5 percent voltage drop in any circuit from the source to the most distant luminaire. Branch circuits will serve a minimum of four (4) luminaires.*

*Pole foundations will be per Standard Drawing 2-16. Luminaire poles will conform to Section 9-29 of the WSDOT Standard Specifications, except as modified herein. Light standards will be tapered aluminum with satin ground finish. The diameter at the base of the pole will not exceed nine (9) inches and the minimum thickness of the pole will be ¼-inch. Mounting height will be 30 feet. Mast arms will be single bracket, taper, minimum ten (10) feet in length. The shaft will heat treated after welding on the based flange to produce T6 temper. The pole and davit arm will be designated to support streetlight luminaries with a minimum weight of 60 pounds and a minimum effective protected area (EPA) of 1.5 square feet. Poles will be designed to withstand a 100 mph (AASHTO) wind loading with a 1.3 gust factor with luminaire and mast arm attached, without permanent deformation or failure. Minimum wall thickness will be 0.188 inches. Poles will be equipped with a removable metal ornamental pole cap secured to the shaft with stainless steel screws. Poles will have a minimum 3 ½ by 6-inch hand hole with cover, near the base and will be equipped with a grounding lug. The pole will also be equipped with a 120V, 20 AMP recessed weatherproof power receptacle, that meets all applicable guidelines and standards. The receptacle will be located thirteen (13) feet above the base of the pole.*

*All luminaries will be a medium cut off. JES Type II distribution and will comply with art standards as established by the Public Utility District No. 1 of Lewis County. Unless otherwise required by PUD #1, luminaries will be: 20-watt, catalog #GEMDCLZOS3A11GMC31.*

*All streetlight electrical installations including wiring conduits and power connections will be located underground. New street lighting will be designed and installed in such a way as to lend with any utility pole-mounted lighting that may exist along the frontage of 1 adjacent properties, but also to accommodate future integration of conforming streetlights along the roadway. To this end, when streetlight(s) are -required along a property, conduit(s) and junction box(es) will be installed along the entire frontage, as appropriate, to allow for the interconnection of future streetlight installations. This requirement may be waived with approval of the Director of Public Works based on the site-specific conditions of the property in question.*

*Alternate streetlight designs may be allowed or required by the ci to accommodate the unique characteristics of a particular street or neighborhood. For example, special lighting may be deemed appropriate along a street that is part of a designated Historic District. The use of any alternate street lighting must approved in writing by the Director of Public Works.*

*The General Notes on the following pages will be included on any plans dealing with streetlight design, in addition to all other applicable requirements.*

### *General Notes (Street Light Construction)*

1. *All workmanship, materials. and testing will be in accordance with WSDOT/APWA, MUTCD, NEC or City of Napavine Public Works Standards unless otherwise specified below. In cases of conflict, the most stringent guideline will apply.*

2. *Washington State electrical permits and inspections are required for all street lighting installations within the City of Napavine. The contractor is responsible for obtaining said permits prior to any type of actual construction.*

3. *A clearly marked service di connect will be provided for every lighting circuit. The location and installation of the disconnect will conform to National Electrical ode (NEC) and these Standards. The photo controls window will face north unless otherwise directed by the city. The service disconnect will not be mounted on the luminaire pole. The service disconnect will be of a type equal to a Milbank C 38- 11115 AALSP2 service, 120/240 VAC, 10/3W, Caltrans Type 3B with contactors. photo controls and test switch. All service disconnects will be used to fullest capacity, i.e., maximum number of luminaires per circuit.*

4. *All lighting wire will be copper with a minimum size of #8. All wire will be suitable for wet locations. All wire will be installed in schedule 80 PVC conduit with a minimum diameter of 1¼ inches. A bushing or bell-end will be used at the end of a conduit that terminates at a junction box or luminaire pole. Conductor identification will be an integral part of the insulation of the conductors throughout the system i.e., color-coded wire. Equipment grounding conductor will be #8 copper. All splices or taps will be made by approved methods utilizing epoxy kits rated at 00 volts, minimum (i.e., 3-M 82-A2). All splices will be made with pressure type connectors (wire nuts will not be allowed). Direct burial wire will not be allowed. All other-installation will conform to NEC, WSDOT/APWA, and MUTCD standards.*

5. *Each luminaire pole will have an in-line, fused, watertight electrical disconnect located at the base of the po)e. Access to these fused disconnects will be through the hand-hole on the pole. The hand-hole will be facing away from on-coming traffic. Additional conductor length will be left inside the pole and pull or junction box equal to a loop having a diameter of one foot. Load side of in-line fuse to luminaire head will be cable and pole bracket wire, 2 conductor, 19-strand copper #10 and will be supported at the end of the luminaire arm by an approved means.*

   *Fuse size, disconnect installation and grounding in pole will conform to NEC standards.*

6. *Approved pull boxes or junction boxes will be installed when conduit runs are more than 200 feet. In addition, a pull box or junction box will be located within 10 feet of each luminaire pole and at every road crossing. Boxes will be clearly and indelibly marked as lighting boxes by the legend, "L.T." or "LIGHTING". See WSDOT Standard Plan J-11a.*

7. *All lighting poles will have tapered round shafts with a linear taper of between 0.125 and 0.14 inches per foot. In existing developed areas, the city may require a specific pole type to maintain consistency within the developed area.*

8. *Cement concrete bases will follow WSDOT Standard Plan J-1b, Sheet 1, Foundation Detail. Conduit will extend between three (3) and six (6) inches above the concrete base.*

9. *All streetlights will include a recessed 120V weatherproof receptacle that meets all applicable guidelines and standards. The receptacle will be located thirteen (13) feet above the base of the pole.*

10. *Any modification to approved plans will be reviewed and approved by the Director of Public Works prior to installation.*

*2D.03 Staking*

*All surveying and staking will be performed by an engineering or surveying firm licensed by the State of Washington and capable of performing such work. A pre-construction meeting will be*

*held with the city prior to commencing staking. The city must inspect all staking prior to construction.*

*The minimum staking of luminaires will be as follows:*

*A. Location and elevation to the center of every pole base*

*B. Location and elevation of each service disconnect.*

*2D.04 Testing*

*All luminaires will be subject to an electrical inspection. Lamp, photo controls, and fixtures will be warranted for a period of one year.*

**FINDING:** This standard applies. The submitted Application does provide a lighting plan.

**CONDITION OF APPROVAL: Prior to engineering approval, a street lighting plan in compliance with Napavine Public Works Standard 2D shall be incorporated into final civil engineering plans and be submitted for City review and approval.**

**CONDITION OF APPROVAL: Banner holders are not to be installed on street lights.**

*2F ROADSIDE FEATURES*

*2F.01 General*

*Miscellaneous features included herein will be developed and constructed to encourage the uniform development and use of roadside features whenever possible.*

*2F.02 Design Standards*

*The design and placement of roadside features included herein will adhere to the specific requirements as listed for each feature, and. when applicable to the appropriate Standards as set forth in Section 1.11.*

*2F.03 Staking*

*All surveying and staking will be performed by an engineering or surveying firm licensed by the State of Washington and capable of performing such work. A pre-construction meeting will be held with the city prior to commencing staking, the city must inspect all staking prior to construction.*

*2F.04 Testing*

*Testing will be required at the developer or contractors' expense on all materials and construction as specified in the WSDOT/APWA Standard Specifications and with a frequency as specified in the WSDOT Construction Manual.*

*2F.05 Survey Monuments*

*All existing survey control monuments that are disturbed, lost, or destroyed during surveying or construction will be replaced at the expense of the responsible builder or developer with the proper monument as outlined below by a land surveyor registered in the State of Washington.*

*A. Street type: Major Arterial; Minor Arterial; Bus Routes and Truck Routes.*

*A pre-cast concrete monument with cast" iron monument case anti cover installed per these Standards is required.*

*B. Street type: Commercial Collector; Neighborhood Collector; and Local Access.*

*A cast-in-place concrete surface monument with sufficient ferrous metal embedded to allow for detection by a magnetic detection device per these Standards is required. Cap will be "Berntsen RB Series" or brass plug marker.*

*C. Required Monument Locations:*

1. *All intersections;*
2. *At the PC and PT's of all horizontal curves;*
3. *At PI of all horizontal curves of streets where the PI lies within the limits of the traveled roadway;*
4. *At all corners, control points and angle points around the perimeter of subdivisions as determined by the city;*
5. *At all section corners, quarter comer, and sixteenth corners within the right-of-way.*
6. *The monument case will be installed after the final course of surfacing has been placed.*

*2F.06 Bus Pullouts and Shelters*

*A. General. Nothing in these Standards will preclude the local transit provider from conducting on-street drop-offs and pickups. The intent of these provisions is to provide general guidelines for the installation of new bus facilities and ensure their proper design and integration with the city's transportation network. They must also meet the needs of the transit provider and the community at large.*

*When bus pullouts and/or shelters are deemed necessary in accordance with the provisions provided herein, the installation of these facilities will be the responsibility of the developer or builder.*

*B. Frequency & Spacing for Public Transit Stops. The city and local transit provider will consider the following general guideline to determine frequency and spacing of improved stops on any given public transit route:*

1. *When determining the physical location of a bus pullout and/or shelter, consideration will be given to vehicle and pedestrian safety, impacts to adjacent property owners, and operational efficiency of the transit service.*
2. *Bus pullouts can be initially located at an average of 4 to 6 stops per route-mile along local residential segments of a route.*
3. *Additional stops may be added if warranted, but will not exceed the basic stop spacing guidelines of 8 to 10 stops per mile and no two stops may be located within 600 feet of one another.*
4. *Site designs for businesses, residential subdivisions, and multi-family developments along transit routes will accommodate transit use. This may include the location of a building entrance near a transit stop; pedestrian walkways, sheltered or unsheltered transit stops, and/or a bus pullout.*

*C. Placement and Design of School Bus Steps. The City and the Napavine School District will use the following criteria to jointly determine the placement and design of school bus stops:*

1. *A school bus stop will be required for each new residential subdivision or apartment complex where school children are to be boarding or disembarking, unless it is determined that adjacent facilities already exist for the site.*
2. *Location of school bus stops will be designed with safety as a paramount concern. Major arterials with high traffic counts should be avoided when possible and only used when bus pullouts are available and significant protection provided for children.*
3. *School bus stops will be designed to compliment the residential environment and provide convenient location and access for neighborhood children including sidewalk access.*
4. *Every effort will be made to make school bus stops and sidewalk access to school bus stops a safe and friendly pedestrian environment.*
5. *The local transit provider and the Napavine School District should make every effort to coordinate the location of bus stops. However, separate bus facilities may be necessary for both service providers.*

D. *Physical Location Requirements. The physical location of all bus pullouts will be primarily determined by the following considerations: maximizing safety, operational efficiency, and minimizing impacts\ to adjacent property. Bus pullouts may be required on all arterial and commercial collector roads for safe bus berthing and to minimize impacts of bus stops on traffic flow. Additionally, bus pullouts may be required on local access roads if road geometry requires, such as determined by the Public Works Department. Maintaining adequate separation between driveways/intersections and bus pullouts can increase the safety and efficiency of both the roadway and the transit service. When locating a bus pullout in reference to existing driveways or a driveway in reference to an existing bus pullout, the following guidelines will be taken into consideration:*

1. *On local roads, bus pullouts will be located a minimum of 55 feet (75 feet preferred), from any driveway as measured from the closest driveway edge to the pullout loading area. On arterial roadways, bus pullouts will be located in accordance with the site distance requirements noted in Section 2B.13 of this chapter.*

*These location requirements will serve as a general guide for bus pullout installations.*

*Alternative distances may be considered if sufficient engine ring data is provided demonstrating that adequate site distance is maintained, pedestrian safety is protected and vehicular traffic is not hindered. The final determination for a bus pullout location must be approved by the Director of Public Works.*

2. *Bus pullouts should not be located where the transit vehicle will block sight distance from a driveway or intersection.*
3. *Driveways should not-be located within the taper of the pullout.*

E. *Transit and School Bus Stop Signage. All designated public transit and Napavine School District bus stops will be identified in some fashion. This may include pavement marking and bus top signs. Contact the local transit provider for details on their sites.*

F. *Shelters. Passenger shelters may be required at-bus pullouts and transfer centers. Shelters may also be required at bus stop as determined by the local transit provider and the Public Works Department.*

*Passenger shelters for public transit sites and Napavine School District sites will be transparent for passenger visibility and safety, provide protection from the elements, and be reasonably vandalism resistant for easy maintenance.*

*G. Shelter installations. When bus shelters are required, they will be installed in the following manner:*

*1. The developer/builder will provide a concrete pad approximately 12 x 10 feet and 6 inches thick. The pad will extend in from the curb or edge of the pavement at a specific location designated by the city. The pad will be constructed in accordance with the design standards for sidewalks as noted in Section 2C of is chapter.*

*2. Upon completion of the pad, the local transit provider will construct the shelter. The developer/builder will be responsible for all appropriate costs associated with the shelter installation. A final Certificate of Occupancy will not be issued until all shelter costs have been reimbursed to the transit provider.*

*H. Design Standards. A pedestrian friendly environment will be designed into all bus stop locations-and surrounding service area to make it user-friendly and safe. The following criteria will be applied to bus stop facilities for new developments:*

*1. Provide paved walkways with a hard all-weather surface linking various sections of subdivisions and developments to peripheral streets with bus stops.*

*2. Provide access ramps and other facilities consistent with barrier-free design standards along walkways leading to bus stops.*

*3. Separate roads and parking areas from pedestrian pathways by grade separations, landscaping and other devises. A minimum four (4) to six (6) foot planting strip will be provided to buffer sidewalks or walkways from streets and parking areas around bus stops and shelters.*

*4. Provide pedestrian-friendly features such as lighting, signs and trash receptacles as warranted by anticipated use.*

*5. New development street systems should be designed to minimize pedestrian travel to bus stops.*

*2F.07 Mailboxes*

*During construction, existing mailboxes will be accessible for the delivery of mall or, if necessary, move to a temporary location. Temporary relocations will be coordinated with the U.S. Postal Service.*

*Location:*

*1. Bottom or base of box will be 36 to 42 inches above the road surface.*

*2. Front of mailbox will be 18 inches behind vertical curb face or outside edge of shoulder.*

*3. New developments. Clustered mailboxes are required (contact the U.S. Postal Service for details). Refer to Standard Drawing 2-18.*

*4. Mailboxes will be set on posts strong enough to give firm support, not to exceed 4x4 inch wood or 1-1/2 inch diameter pipe, or a material and design with comparable breakaway characteristics.*

*5. All developments above two (2) units must have kiosks for mail delivery.*

*2F.10 Street Trees*

*In order for developers or property owners to plant trees, shrubbery or vegetation that may attain a height of more than 30-inches within the of-way, they must first apply for and obtain a right-of-way permit from Public Works Department. The application must include information on type of tree or plant and the proposed location placement.*

*Certain varieties of trees are prohibited from being planted within a city right-of-way. Such trees are excluded from the right-of-way to protect utilities and infrastructure or to minimize visual obstructions and interference. Trees not to be planted within a city right-of-way specifically include the following:*

*Alder; Apple (fruiting); Ash, Mountain; Birch, White Cherry (fruiting); Chestnut, Cottonwood, Elm, American Hawthorne, London Plane; Maple Big leaf; Maple, Oregon; Maple, Silver; Oak, Pine; Pagoda; Pear (fruiting); Plum (fruiting); Poplar; Sycamore; Walnut: Willow; and any other species of tree with a propensity to produce large or extensive root systems that may interfere with or damage underground utilities or public infrastructure including streets, curbing, and sidewalks.*

*Also prohibited from being planted within the right-of-way are any other species of plants or trees that will create an obstruction or potential obstruction to traffic, pedestrian visibility or safe public use of the right-of- way.*

**FINDING:** This standard applies.

**CONDITION OF APPROVAL: Prior to engineering approval, Applicant shall incorporate Napavine Public Works Standard 2F into engineering plans for City review and approval.**

*2G Traffic Impact Analysis*

*2G.01 General*

*A Traffic Impact Analysis (TIA) is a specialized study of the impacts that a specific typed and size of development will have on the surrounding transportation system. The TIA is an integral part of the development review process. It is specifically concerned with the generation, distribution, and assignment of traffic to and from a new development or a re- development. "New development" is defined as any site action involving SEPA.*

*This may include previous development on a site with consideration to cumulative impacts for the purpose of making a SEPA threshold decision. Re- development will include expanded or increased development, or use or occupancy of a building or site that has been dormant for a period of more than five years.*

*For the purposes of this document, the term "proposed project" will be used to refer to the both new development and re-development.*

*These guidelines have been prepared to establish the requirements for a TIA. If a TIA is determined to be necessary for a project, the Public Works Department will have the lead role during the process, and will be the contact agency for matters relating to the TIA. The Public Works Department will also be responsible for reviewing and accepting TIA's as well as approving measures to mitigate impacts.*

*2G.02 When Required*

*The need for a TIA will be based on; the size of the proposed development, existing street and intersection conditions, traffic volumes, accident history, community concerns, and other pertinent factors associated with the proposed project.*

*A. TIA will be required if a proposed development meets one or more if the following conditions:*

*B. The proposed project generates more than ten (10) vehicles in the peak direction of the peak hour on the adjacent streets and intersections. This includes the summation of all turning movements that affect the peak direction of traffic.*

*C. The proposed project generates more than 25 percent of the site- generated peak hour traffic through a signalized intersection or "critical" movement at a non-signalized intersection.*

*D. The proposed project is within an existing or proposed transportation benefit area. This may include Transportation Benefit Districts (TSO), Local Improvement Districts (LID), or local state transportation improvement areas programmed for development reimbursement.*

*E. The proposed project may potentially affect the implementation of the street system outlined in the transportation element of the Comprehensive Plan, the Six-Year Transportation Improvement Program, or any other documented transportation project.*

*F. If the original TIA was prepared more than two (2) years before he proposed project completion date.*

*G. The increase in traffic volume as measured by ADT, peak hour, or peak hour of the "critical" movement is more than 10 percent.*

*Even if it is determined that a TIA is not required, the Director of Public Works may require the developer to have a Trip Generation Study (TGS) conducted. TGS's will be used to forecast project generated traffic for an established future horizon.*

*2G.03 Qualifications for Preparing TIA Documents*

*The TIA will be prepared by an engineer licensed in the State of Washington and with special training and demonstrated experience in traffic engineering. The applicant will provide the Public Works Director with the credentials of the individual(s) selected to perform the TIA for approval prior to initiating the analysis.*

*2G.04 References*

*In conducting TIA's and TGS's, the method for determining capacity will be as described in the most recent version of the "Transportation Research Board Highway Capacity Manual", and the method for determining project- generated traffic volumes will be as forecasted using the most recent edition of "Institute of Transportation Engineers Trip Generation Manual".*

*2G.05 Scope Of Work*

*The level of detail and scope of work of a TIA may vary with the size, complexity, and location of the proposed project. A TIA will be a thorough review of the immediate and Jong-range effects of the proposed project on the city's transportation system. The analysis will include the following elements, as applicable:*

*A. Provide a reduced copy of the site plan, showing the type of development, street system, right-of-way limits, access points, and other features significant to the city's transportation system. The site plan will also include pertinent off-site information such as locations of adjacent intersections and driveways. land-use descriptions and other features of significance.*

*B. Provide a vicinity map of the project area showing the transportation system to be impacted by the development.*

*C. Discuss specific development characteristics such as the size and type of development proposed (single-family, multi-family, retail, industrial, etc.), internal street network, parking spaces provided, zoning, and other pertinent factors attributable to the proposed project.*

*D. Discuss project completion and occupancy schedule for the proposed project. Identify horizon year(s) for traffic analysis purposes.*

*2G.06 Existing Conditions*

*A. Discuss street characteristics including functional classification, bicycle path corridors and traffic control at study intersections, number of traveled lanes, lane width, and shoulder treatment. A figure should be used to illustrate existing transportation facilities. Refer to the Sample TIA Figure, included herein.*

*B. Identify safety and access problems including discussions on accident history, sight distance restrictions, traffic control, and pedestrian conflicts.*

*C. Utilize all available traffic data from the City of Napavine and surrounding jurisdictions, if applicable. If data is unavailable, the individual or firm preparing the TIA will collect the necessary to supplement the discussions and analysis in the TIA.*

*D. Conduct manual peak hour turning movement counts at study intersections if traffic volume data is more than two (2) years old, unless otherwise required by the Director of Public Works. A copy of the reduced data will be included with the TIA. The peak hour(s) to be counted and analyzed will be the time period(s) when the combination of proposed project traffic and existing traffic is highest. A study intersection is any arterial/collector intersection impacted by ten (10) or more proposed project trips during the peak hour(s) analyzed by the TIA. The Director of Public Works may require that the study also include additional intersections or areas.*

*E. A figure will be prepared showing existing average daily traffic (AIDT) and peak hour traffic volumes on the adjacent streets and intersections in the study area. Complete turning movement volumes will be diagramed or illustrated and included in the TIA. The figure will represent the existing traffic volumes for analysis purposes. Refer to the Sample TIA Figure included herein.*

*2G.07 Development Traffic*

*This element of the TIA will identify the limits of the study area. The study area will include all pertinent intersections and streets impacted development traffic.*

*The threshold requirement of development traffic of ten (10) vehicles in peak direction of the peak hour on the adjacent streets and intersections will apply. The threshold requirement of the development generating 25 percent or more of site-traffic through a signalized intersection or "critical" movements at a non-signalized intersection will also apply. Each arterial/collector intersection and street impacted as described will be included in the study area for analysis purposes.*

*A figure illustrating the proposed trip distribution for the proposed project be included in the TIA. The TGS will be displayed in a tabular format the figure with peak-hour traffic volumes assigned to the study area accordance with the trip distribution.*

A. *Trip Generation. Site-generated traffic of proposed projects willie estimated using the latest edition of the "Institute of Traffic Engineers Trip Generation Manual Variations of trip-rates will require the approval of the Director of Public Works. Trip-rate equations will be used for all land-use categories where applicable. Average trip-rates will be allowed for those land-uses without trip-rate equations. Site traffic will be generated for daily A.M. and P.M. peak-hour periods. A "pass-by" traffic volume discount for commercial centers will not exceed 25 percent unless approved by the Director of Public Works.*

B. *Trip Distribution. Trip distribution methodology will be clearly defined and discussed in detail in the TIA. For large development projects, the Public Works Director may require a regional trip distribution map. The TIA will identify other transportation mode that may be applicable, such as transit use, bicycle, and pedestrian facilities:*

*2G.08 Future Traffic*

A. *Future Traffic Conditions Not Including Site Traffic. Future traffic volumes will be estimated using information from existing transportation forecasts or models, other planned or programmed "on-line" development, and/or transportation projects, or by applying an annual growth rate to the existing traffic volumes as defined in the Chehalis Comprehensive Plan. The future traffic volumes will be representative of the horizon year(s) for project development. Forecasted non-project traffic will be added to existing traffic and illustrated in a figure.*

B. *Future Traffic Conditions Including Site Traffic. The site-generated traffic will be assigned to the street network in the study area based on the approved trip distribution. The site traffic will be combined with forecasted traffic volumes, not including site traffic to show the total traffic conditions estimated at development completion and at the future horizon year. A figure will be required showing daily and peak period turning movement volumes for each traffic study intersection. Refer to the Sample TIA Figure, included herein. In addition, a figure will be prepared showing future traffic conditions, not including site traffic volumes, with site-generated traffic added to the street network.*

   *Unless the city specifically authorizes another future horizon year or a development, the initial target year for determining future traffic will be five (5) years after the development has been occupied or in II operation for twelve (12) months.*

*2G.09 Traffic Operations*

*A Level of Service (LOS) analysis will be conducted for "screen line" in the study area. The "screen lines" and level of service information will be developed in conjunction with the Chehalis-Comprehensive Plan. The methodology and procedures for conducting the capacity analysis will follow the guidelines specified in the most recent version of the 'Transportation Research Board Highway Capacity Manual'. The LOS for each "screen line" will include the following conditions:*

A. *Existing peak hour traffic volumes*

B. *Future traffic volumes not including site traffic*

C. *Future traffic volumes including site traffic*

*LOS results for each traffic volume scenario will be summarized in a single table. The LOS table will include results for A.M. and P.M. peak periods, if applicable. The table will show LOS conditions with corresponding vehicle delays for signalized intersections and reserve capacity or delay for the "critical" movements at non-signalized intersections. For signal zed intersections. the LOS conditions and average vehicle delay will be provided for each approach and the intersection as a whole, in an appendix at contains all LOS calculation sheets.*

*The LOS analyses for existing signalized intersections will include existing phasing, timing, splits and cycle lengths in the analysis as observed and measured during the peak hour traffic period.*

*If the proposed project is scheduled for completion in phases, the TIA will conduct a LOS analysis for each separate development phase. he incremental increases in site traffic from each phase will be included in the LOS analysis for each proceeding year of development completion. A figure will be required for each horizon year of phased development.*

*If the proposed project impacts a coordinated traffic signal control system currently in operation, the TIA will include an operational analysis of the system. Timing plan and proposed modifications to the coordination system will also be required. For non-signalized intersections, the "Highway Capacity Manual" methodology will be used.*

*The computer software package(s) used for capacity analysis applications will be approved by the Director of Public Works. The Director of Public Works may require that a copy of the computer worksheets along with a 3 1/2" floppy disk of each capacity analysis be submitted concurrently with the TIA to the Public Works Department.*

*2G.10 Mitigation*

*The TIA will include a proposed mitigation plan. The mitigation may be either the construction of necessary transportation improvements or contributions to the city for the proposed project's fair share cost of identified future transportation improvements, as approved by the Director of Pu lie Works. Levels of Service "E" and "F" will be used as the threshold for determining appropriate mitigating measures on roadways and intersections in the study area. Mitigating measures will be required to the extent that the transportation facilities operate at a LOS "C" (LOS-C) condition or better upon completion of the development.*

*The following guidelines will be used to determine appropriate mitigating measures of traffic impacts generated by proposed projects.*

*A. The cost for the mitigation will be entirely born by the proposed project. However, in the event that more than one development is being proposed within the study area, a Latecomers Agreement for reimbursement of mitigations costs may be proposed by the project under consideration. The Director of Public Works will then determine the applicability of this request.*

*B. City projects involving transportation facilities programmed for improvements. and having an adverse traffic impact, will be mitigated by, providing a proportionate share of the local costs for the improvements. This share will be based on the percentage -of proposed project traffic generated through the intersection. The percentage will be based on the total projected peak hour traffic volumes for the horizon year of the transportation facility, or as defined by the ordinance establishing the cost-sharing mechanism for off-site street improvements.*

C. *Non-signalized intersections that currently operate at less than Level of Service "C" (LOS-C) will be analyzed for traffic signal and intersection improvements. If three or more traffic signal warrants are satisfied. signal and intersection improvements will be required as a mitigating measure for the proposed project. If at least three (3) signal warrants are not satisfied by the* proposed project's horizon year, the TIA will determine if traffic signal warrants and intersection improvements would be needed within a five (5) year period after the proposed project's horizon year. If so, the proposed project would then be required to provide a proportionate share cost of future traffic signal and intersection improvements.

*When an off-site street improvement(s) is not scheduled to be installed in the near future. the city may allow a developer require to share in the costs of such improvement(s), to post a bond in the amount of the developer's pro-rata share of such improvements. Any developer desiring to post a bond with the city in the amount of the pro-rate share of improvement costs must submit a request in writing to the Director of Public Works, along with all applicable justification or information supporting the request. The Public Works Director ill submit all request(s) to the City Council who will then make a decision at a regularly scheduled council meeting. All decisions made by the Council will be considered final.*

*2G.11 Mitigation Fee Calculation*

A. *The formula for calculating a developer's mitigation fee or proportional share of an off-site street improvement is derived by dividing the Project Generated Traffic by the Future Traffic with the Project. In order to determine the developer's pro-rata costs of an off-site street improvement, and this value is multiplied by the Project Costs. Mathematically this formula is written as follows:*

   *PGT/FTP x PC = DMF*

   *PGT = Project Generated Traffic FTP= Future Traffic with the Project PC = Project Cost*

   *DMF = Developer's Mitigation Fee*

B. *Participation Threshold. The city has established a participation threshold of ten (10) trips per peak hour. The ten (10) trips per peak hour sets the minimum level at which a developer will be required to participate. As part of the TIA and/or TGS, intersections and traffic locations will be identified when there will be or are ten (10) or ore new peak-hour generated trips.*

**FINDING:** This standard applies. The submitted Application provided a TIA. ITE data indicates the proposed development may generate 1865 daily trips, 137 AM peak hour trips (34 in / 103 out) and 186 PM peak hour trips (117 in / 69 out). Existing PM peak hour level of service (LOS) at the intersections of study indicated LOS B or better conditions. All study intersections have a LOS D standard. Forecast LOS analysis was performed using a five-year horizon which included a background growth rate and project-generated traffic added to the roadway network. Forecast 2029 PM peak hour conditions are anticipated to operate with LOS C or better delays at all outlying study intersections, meeting City and WSDOT service level standards. Moreover, a left-turn lane was not found to be warranted at the Woodard Road accesses or at Woodard Road & E Washington Street. The proposed development is not found to result in any service level deficiencies for Phase 1.

*CHAPTER 3 STORMWATER DRAINAGE AND EROSION CONTROL*

*3A Stormwater Management*

*3A.01 General*

*The standards established by this chapter are intended to represent the minimum standards for the design and construction of storm drainage facilities.*

*The City of Napavine Stormwater Management Plan" and the most recent version of the "Stormwater Management Manual for the Puget Sound Basin' documents are considered a part of this chapter as well as the City Public Works Standards, except as supplemented herein. The Stormwater Management Plan sets forth the minimum drainage and erosion control requirements as supplemented herein.*

*3A.02 Design Standards*

*The design of storm drainage and/or retention/detention systems will depend on their type and local site conditions. The design elements of storm drainage systems will conform to these Standards and follow current design practice as set forth in the City of Napavine Stormwater Management Plan. Properties will not be developed in such a way as to discharge stormwater onto adjacent lots.*

*The General Notes on the following pages will be included in all plans dealing with stormwater conveyance and/or detention.*

***General Notes (Storm Drain Construction)***

1. *All workmanship and materials will be in accordance with the City of Napavine public Works Standards and the most recent copy of the State of Washington Standard Specifications for Road, Bridge and Municipal Construction (WSDOT/APWA).*
2. *Temporary erosion/water pollution measures will be required in accordance with the Stormwater Management Plan and Section 1-07.15 of the Standard Specifications.*
3. *Comply with all other permits and requirements of the City of Napavine and/or other! governing authorities or agencies.*
4. *A pre-construction meeting will be held with the Public Works Department prior to the start of construction.*
5. *All storm mains and retention/detention areas will be staked for grade and alignment by an engineering or surveying firm capable of performing such work.*
6. *Storm drainpipe will meet the following requirements:*
    a. *Plain concrete pipe conforming to the requirements of MSHTO M 86, Class 2.*
    b. *Reinforced concrete pipe conforming to the requirements of AASHTO M 170.*
    c. *PVC pipe conforming to ASTM D 3034 SOR 35 or ASTM F794 or ASTM F679 Type 1 with joints and gaskets conforming to ASTM D 3212 and ASTM F 477.*
    d. *Ductile iron pipe conforming to the requirements of AWWA C 151, thickness class as shown on the plans.*
    e. *High-density polyethylene smooth interior pipe conforming to AASHTO M252 types or AASHTO M294 types. with a gasketed bell and spigot joints.*
    f. *Aluminized steel helical or spiral rib pipe in diameters of thirty (30) inches or greater, with a Manning's value of 0.020 or less.*
7. *Special structures, oil/water separators and outlet controls will be installed per plans and manufacturers recommendations.*
8. *Provide traffic control plan(s) as required in accordance with MUTCD to the Public Works Department. Traffic control plans must be approved prior to the start of construction.*
9. *Call the Utilities Underground Location Center at 1-800-424-5555 a minimum of two (2) business days prior to any excavations.*
10. *Where connections require "field verifications", the contractor will expose connection points and verify necessary fittings two (2) business days prior to initiating the work.*

11. *All storm lines and catch basins will be high-velocity cleaned and pressure tested in accordance with Division 7 of the Standard Specifications prior to paving. Hydrant flushing of the lines is not an acceptable cleaning method. Testing of the storm main will include television* inspection at the contractor's expense. The Director of Public Works will determine whether the inspection will be performed by the city or by a representative of the contractor under the city's direction. Testing will take place after all underground utilities are installed and compaction of the roadway subgrade is completed.

12. *Fill placement will not be allowed in any open channel used for storm conveyance without written approval from the Public Works Director.*

*Stormwater conveyance and detention systems will be designed in accordance with the following design standards table:*

| | | |
|---|---|---|
| Hydrologic Model | | |
| Conveyance Design | | |
| | <50 acres | Rational Method |
| | >50 <200 acres | SGS-based Hydrograph Method |
| | >200 acres | Continuous Simulation Method |
| Detention Design | <50 acres | SCS Unit Hydrograph Method with Level Pool Routing |
| | >50 acres | Continuous Simulation Method |
| Design Storm Frequency | | |
| Conveyance | | Capacity to handle: 100-year storm event |
| Detention | | Prevent peak flow increase: 100-year storm event<br>Evaluation of erosion control: 2-year storm event and 10-year storm event |
| Design Storm Duration/Distribution | | |
| Hydrograph Method | | 6 and 24-hour duration |
| SCS Unit Hydrograph Method | | 6 and 24-hour durations SCS Type 1A distribution |
| Rational Method | | Time of concentration Constant rainfall intensity |

*3A.03 Conveyance*

*Pipe: Storm drainpipe within a public right-of-way or. easement will be sized to carry the maximum anticipated runoff from the contributing area. Th calculations of anticipated runoff and pipe sizing will be developed by a professional engineer lice sed in the State of Washington. The developer will provide the calculations and all associated information to the Public Works Department.*

*The minimum main size will be twelve (12) inch diameter, smaller pipe sizes will be considered on a case-by-case basis as approved by the Director of Public Works. Lateral lines may be six (6) inch diameter. The city may require the installation of a larger main if it is determined that a larger size is needed to serve adjacent areas or for future service. The installation of a larger main may*

*allow the develop.er to seek partial reimbursement through a Latecomers Agreement. (see Chapter 1 for details)*

*All pipe used for storm mains will comply with one of the following types:*

*A. Plain concrete pipe conforming to the requirements of AASHTO M 86. Class 2.*

*B. Reinforced concrete pipe conforming to the requirements of AASHTOM 170.*

*C. PVC pipe conforming to ASTM D 3034 SOR 35 or ASTM F 794 or ASTM F679 Type 1 with joints and gaskets conforming to ASTM D 3212 and ASTM F 477.*

*D. Ductile iron pipe conforming to the requirements of AWWA C 151, thickness class as shown on the plans.*

*E. High-density polyethylene smooth interior pipe conforming to AASHTO M252 types or AASHTO M294 type S, with a gasketed bell and spigot joints.*

*F. Aluminized steel helical or spiral rib pipe in diameters of thirty (30) inches or greater. with a Mannings" value of 0.020 or less.*

*Channels: Open vegetated channels may be utilized for stormwater conveyance when deemed appropriate by the Public Works Department. Open channels located in a public right-of-way will be sized to carry the maximum anticipated runoff from the contributing area without exceeding the confines of the channel. In addition, when the end of the "new" conveyance system is within twenty (20) feet of another piped drainage system, the "new" system will be extended through the open portion to complete the closed system. Extensions to complete closed drainage systems will only be required along the property where the •new" system originates, unless deemed necessary by the Director of Public Works.*

*When the flow of an open channel is interrupted by the construction of a driveway, the entire channel across the property will be enclosed with piped system, unless deemed impractical by the Director of Public Works. However, the culvert under the driveway must be installed to accommodate closure of the ditch in the future. The channel enclosure may necessitate the inclusion manholes and/or catch basins.*

### *3A.04 Catch Basins*

*Maximum catch basin spacing will be 300-feet on all street classifications. No surface water will cross any roadway to private property. Additional manholes and/or catch basins may be required by the city to accommodate the maintenance needs of the storm system.*

### *3A.05 Staking*

*All surveying and staking will be performed by an engineer or surveyor licensed. by the State of Washington and capable of performing such work. Staking will be maintained throughout the construction operation.*

*A pre-construction meeting will be held with the city prior to commencing staking. The city will inspect all construction staking prior to construction.*

*The minimum staking of storm sewer systems will be as follows:*

*A. Stake centerline alignment every twenty-five (25) feet with cuts and/or fills to bottom of trench.*

*B. Stake location of all catch basins/manholes and other fixtures for grade and alignment.*

*C. Stake location. size and depth of retention/detention facility.*

*D. Stake finished grade of catch basin/manhole rim elevation and invert elevations of all pipes in catch basins. manholes, and those that daylight.*

*3A.06 Trench Excavation*

*See Chapter 4.16 of these Standards for requirements regarding trench excavation.*

*3A.07 Backfilling*

*See Chapter 4.18 of these Standards for requirements regarding backfilling.*

*3A.08 Street Patching and Restoration*

*See Sections 2B.15 and 2B.16 of these Standards for requirement regarding street patching and trench restoration.*

**FINDING**: This standard applies. The submitted site plan contained stormwater details. In addition, the Applicant provided a Drainage and Erosion Control Plan for City review and approval. The preliminary stormwater design meets 2019 SWMMWW standards.

**CONDITION OF APPROVAL: Prior to engineering approval, a final engineered stormwater plan and technical information report compliant with Chapter 3A and 2019 SWMMWW standards shall be submitted for review and approval by City.**

**CONDITION OF APPROVAL: During construction, infiltration facilities shall be tested to verify design infiltration rate. All facilities shall demonstrate ground water separation.**

*3B Erosion Control*

*3B.01 General design criteria*

*Alf projects requiring Public Works Department approval, as defined by these Standards, will include erosion control plans If any of the following conditions are met:*

*A. Proposed land disturbance activities that could cause sediment runoff beyond the project limits.*

*B. A Clearing, Filling or Grading Permit is required.*

*C. The proposed project could possibly impact a nearby stream, wetland, or body of water.*

*D. When deemed necessary by another permitting authority.*

*Site work will not commence until all erosion control measures have been set in place in accordance with the approved erosion control plans.*

*The contractor/applicant must ensure that all erosion control measures are properly maintained in accordance with standard industry procedures.*

*The General Notes on the following pages will be included on any plans dealing with erosion control.*

***General Notes (Erosion Control)***

*1. Erosion control measures will be in place prior to the beginning of construction. A representative from the Public Works Department will inspect and approve the erosion control measures prior to the start of construction.*

2. *Erosion control measures are not limited to the items on this plan. The contractor is responsible for the installation and maintenance of all erosion measures, as required under most recent version of the Napavine stormwater Management Plan. Care will be taken to prevent migration of silt and/or polluted runoff to off- site properties.*
3. *The contractor will make regular surveillance of all erosion control measures. In addition, erosion control will be thoroughly inspected after each rainfall event. The contractor will make any necessary repairs, modifications, and additions, as necessary to ensure the proper operation of the erosion control measures. The city may require more frequent inspections of erosion control measures by the contractor should site or weather conditions dictate.*
4. *During the wet season, November through March, all disturbed soils will be stabilized within forty-eight (48) hours after land disturbance activities have ceased. Erosion control measures will include, but are not limited to, installation of straw matting, jute matting, straw mulch and/or wood chips, and covering the affected area and spoil piles with plastic sheeting.*
5. *The contractor will check all seeded or sodded areas regularly to ensure that the vegetative cover is being adequately established. Areas will be repaired, reseeded, and fertilized as required.*
6. *Tracking of soil off-site will not be allowed. If any soil is tracked beyond the limits of the site, it will be removed before the end of that working day. To prevent additional tracking, vehicle tires must be swept or washed prior to leaving the project site.*
7. *No more than 500 lineal feet (LF) of trench on a down-slope of more than five (5) percent will be opened at one time.*
8. *Excavated material will be placed on the uphill side of trenches.*
9. *Excavated material will not be placed in established drainage ditches, under any circumstances.*
10. *Trench dewatering devices will be discharged in a manner that will not adversely affect flowing streams, drainage systems, or off-site properties. An established sediment trap will be used as the receiver for all trench dewatering operations.*
11. *All disturbed areas will be seeded or sodded upon completion of work. The contractor will be responsible to ensure that complete coverage of the disturbed areas is provided and that growth of vegetation is established. Seed and sod applications will be conducted in accordance with the timelines noted in the most recent edition of the WSDOT Standard Specifications.*
12. *All erosion control will remain in place until such time as the site is adequately stabilized. Prior to removal of erosion control measures, the Public Works Department will be notified for final inspection and approval.*

*3B.02 Best management practices*

*Erosion control may include the following:*

***A. Sedimentation Ponds***

*Sedimentation ponds are utilized to collect runoff generated on a construction site, thereby allowing sediment to be captured before the runoff leaves the site. Sedimentation pond design will include the following considerations:*

1. *computation of the sediment storage volume*
2. *computation of the settling volume*
3. *computation of the pond surface area -*

*(surface area, in sf= 1,250 x 1-yr, 24 hour storm rate, in cfs)*

***Minimum pond dimensions** are as follows:*

1. *2-foot depth for settling*
2. *3-foot depth for sediment storage*
3. *3:1 side slope*

*The contractor will inspect sedimentation ponds immediately after each rain event to ensure the integrity of the facility. The contractor will also remove the majority of the sediment collected in the ponds whenever the storage volume is exceeded or the settling volume is infringed upon. In addition, prior to the final completion of the project, ponds will be cleaned out in their entirety.*

*The length/width ratio of the pond will be as large as possible. A 5:1 ratio is the preferred minimum, but exceptions will be granted when deemed appropriate by the Director of Public Works. The. pond will be divided into a series of at least two (2) separate chambers. Perforated pipe risers will be used to convey water between the chambers and at the outlet.*

***B. Interceptor Channels***

*Interceptor channels are used to capture runoff generated on a construction site before it can leave the project limits. The channel is often used in combination with a sedimentation pond. The channel is typically grass lined and runs along the perimeter of the site. The grass must be established prior to the start of construction. Therefore, sod is often used to establish the vegetated surface of the channel. Upon completion of the project, the sod can be removed and re-used if the ditch is filled in and restored with a suitable and stable cover material.*

***C. Sediment Barriers***

*Sediment barriers are filtering devices that are run along the perimeter of a site to capture sediment while allowing runoff water to continue along its natural path. Silt fencing and hay bales are common examples of sediment barriers.*

*Regular removal of sediment is required to ensure that the barriers function properly. In addition. the structural integrity of the barriers must be maintained at all times. Barriers will be installed, inspected and repaired, in accordance with the details and requirements included in these Standards.*

***D. Stabilized Construction Entrance***

*A stabilized construction entrance is a rocked access point to a construction site. The entrance reduces material carried from the site onto the public right-of-way.*

*Construction entrances must be cleared of mud and debris regularly to ensure that materials are not being tracked from the construction site, onto the right-of-way and beyond. The contractor is responsible for all required maintenance of entrances.*

***E. Detention/Retention Facilities***

*No retention/detention facility will be located in an area that is used to satisfy an open space requirement unless it enhances a recreational amenity. Use of designated open space areas for stormwater detention/retention and infiltration must satisfy all conditions of the City of Napavine for usability, landscape conformity and ease of access. The city will make the final determination whether or not the proposed stormwater facilities are compatible with and satisfy the intent of an open space.*

*The primary purpose of a consolidated open space is to provide usable area for recreation activities, buffer zones, and green belt areas. and must be designed for this intent. Any use of this area for stormwater detention/retention must clearly be subordinate to and not detract from open space uses. The usable open space will be predominantly flat, and in no case. exceed 4:1 where drainage facilities represent. A minimum of 50 percent of the linear slope length will not exceed 7:1.*

*The Director of Public Works will review the use of commercial. parking lots for stormwater detention on a case-by-case basis. The detention area will be situated away from areas of pedestrian movement. The maximum depth of water in parking lot storage will be limited to twelve (12) inches.*

**FINDING:** This standard applies. The submitted site plan provides a Drainage and Erosion Control Plan.

**CONDITION OF APPROVAL: Prior to construction, erosion control devices shall be installed and shall remain in place until the soil has stabilized.**

*CHAPTER 4 WATER*

*4.01 General*

*Any extension of the Napavine Water System must be approved by the Department of Public Works and conform to Department of Health, the City of Napavine Water System Plan.*

*In designing and planning for any development, it is the developer's responsibility to determine that adequate water for both domestic use and fire protection is attainable. Proposed plans must show how water will be supplied and whether adequate water pressure and volume will be maintained in case of fire. An analysis of the system may be required if it appears that the system might be inadequate.*

*Anyone desiring to extend or connect to the city water system must contact the Public Works Department for a Water/Sewer/Stormwater Application form. After the completed application is returned to the Public Works Department, along with any other information that may be required or requested, staff will determine the costs to connect to city utilities. Extension of or connection to city water lines outside of the Napavine Urban Growth Area (UGA) are permitted only when a demonstrated public health risk exists and has been identified in writing by an appropriate health agency.*

*Prior to the issuance of a water meter for development projects, all Public Works improvements must be completed and approved. including granting of right-of- way or easements, submission and acceptance of as-built drawings, and all applicable fees must be paid.*

*Building permits for new construction of single-family subdivisions will not be issued without final approval of the Public Works Director. For commercial projects. building permits may be issued upon completion and acceptance of the required fire protection facilities. A construction bond, in accordance with Section 1.14 of these Standards. will be required for the remaining improvements. A Certificate of Occupancy will not be issued until final Public Works approval is given for all improvements.*

*4.02 Design Standards*

*The design of any water extension/connection will conform to these Standards and all other applicable standards. The layout of extensions will provide for continuation and/or looping of the existing system.*

*The General Notes on the following pages will be included on all plans dealing with the Napavine water system.*

***General Notes (Watermain Installation)***

1. *All workmanship and material will be in accordance with City of Napavine Standards and the most recent copy of the WSDOT/APWA Standard Specifications for Road, Bridge and Municipal Construction, American Water Works Association (AWWA) Standards and ANSI/NSF Standard 60 or 61.*
2. *A pre-construction meeting will be held with the Public Works Department prior to the start of construction.*
3. *All watermains will be ductile iron cement mortar lined thickness Class 52.*
4. *Gate valves will be resilient wedge, NRS (non-rising stem) with O-rings seals. Valve ends will be mechanical joint or ANSI flanges. Valves will conform L AWWA 509-80. Valves will be Mueller. M & H, Kennedy, Clow R/W or Waterous.1 Series 500. Existing valves and all valves installed directly to and connected to a! portion of the active water system are to be operated by city employees only.*
5. *Fire hydrants will be Installed every 200: M & H Series 929, and be equipped w/Storz Adaptors. Hydrants will be installed in accordance with the most recent version of the Uniform Fire Code. Hydrants will be bagged and the connecting gate valves left closed until the system has been approved. Hydrants must be painted with sunburst yellow high-grade enamel after installation.*
6. *All lines will be chlorinated and tested in conformance with the above referenced specifications. (see Note 1)*
7. *All pipes and services will be installed with continuous tracer tape placed twelve (12) to eighteen (18) inches under the proposed finished subgrade. The marker will be of plastic non-biodegradable, metal core, or backing marked 0 WATER" that can be detected by a standard metal detector. Tape will be Terra Tape "D" or approved equal. In addition to tracer tape, toning wire will be installed over all pipe and services. Toning wire will be UL listed, type UF, fourteen (14) gauge solid coated copper wire, taped to the top of the pipe to prevent movement during backfilling and laid loose enough to prevent stretching and damage before being brought up and tied off at the valve operating nut or valve box. If the operating nut is not easily accessible from the ground surface, the copper wire will be tied off at the valve box in such a way that the wire is easily accessible from the ground surface. Two (2) feet of slack will be provided to allow for connection to the locator.*

   *A 1-lb magnesium anode will be buried with the pipe every 1,000 linear feet maximum for cathodic protection of the toning wire. Toning wire splices and connections to anodes will join wires both mechanically and electrically and will employ epoxy resin or heat-shrink tape insulation. Toning wire will be tested prior to acceptance of the pipe system. A written notice from the contractor to the city must be received two (2) business days prior to when testing is required.*
8. *The contractor will provide traffic control plan(s) as required in accordance with MUTCD.*
9. *All watermains will be staked for grades and alignment by an engineering or surveying firm capable of performing such work. Staking will be maintained throughout construction..*

10. *All service. line and water valve locations. will be marked on the face of the adjacent curb with a "W" or "WV" embossed ¼-inch into the concrete.*
11. *Ail water system connections serving buildings or properties with domestic potable water, fire sprinkler or irrigations systems will comply with the minimum backflow prevention requirements established by the Department of Health (DOH) and the City of Chehalis Cross-Connection Control Program*
12. *Call Utilities Underground Location Center at 1-800-424-5555 a minimum of two (2) business days prior to any excavations.*
13. *The city will be notified five (5) business days prior to scheduling a water system shutdown. The city's Water Division will perform all water system shutdowns. When connections require "field verification," connection points will be exposed by the contractor and fittings verified by the city two (2) business days prior to the distribution of shutdown notices. Customers involved with or affected by water service interruptions will be notified at least forty-eight (48) hours in advance. Shutdowns will not be permitted on Fridays, weekends, or holidays without written authorization from the Director of Public Works.*
14. *When connecting to an existing waterline where a new valve is not to be installed, the existing valve must be pressure tested to these Standards by the contractor prior to connection. If an existing valve fails to pass the test, the contractor will make the necessary additional provisions to test the new line prior to connecting to the existing system or will install a new valve. New lines will not be connected to the existing system until all required tests have been passed.*

*4.03 Watermain*

***A. General***

*Watermains will be sized to provide adequate domestic water plus fire flows at the required residual pressure. Fire flow requirements will be determined by City of Napavine Fire Services. However, the quantity of water required will in no case be less than 1,000 gpm at 20 psi residua, pressure in single family and/or duplex residential areas, or less than 1,500 gpm at 20 psi residual pressure in multi-family residential areas, commercial areas and/or industrial areas.*

*The minimum watermain size will be six ($) inches in diameter when looped. Dead-end mains will be a minimum of eight (8) inches in diameter. All mains that may be extended or looped must end with an approved flanged gate valve and blind flange. A straddle block will be installed at a point along the last length of pipe preceding the valve, in lieu of a thrust block at the end.*

*Larger sized mains may be required in specific areas identified in the Napavine water System Plan. The city may also require the installation of larger mains if determined necessary to meet fire protection needs domestic requirements and/or for future service needs. (see Chapter 3: Latecomer Fees)*

***B. Piping***

*All pipe for watermains will have flexible gasketed joints and will comply with the following specifications, however, nothing will preclude the city from requiring an alternate pipe type based on site conditions and/or the needs of the system.*

*Ductile Iron Pipe will conform to AWWA C 151 Class 52 and will have cement mortar lining conforming to AWWA C 104. All pipes will be joined using non-restrained joints that will be rubber gaskets, push-on type or mechanical joint, conforming to AWWA C 111.*

***C. Fittings***

*All fittings will be ductile iron-compact fittings conforming to AWWA C15 or, AWWA C110 or C111. All fittings will be cement mortar line conforming to AWWA C 104. Plain-end fittings will be ductile iron if mechanical joint retainer glands are installed on the plain ends. All fitting will be connected by flanges or mechanical joints. The city may require the use of MEGALUG retainers for a waterline installation, as necessary.*

***D. Pipe Installation***

*All pipe and services will be installed as directed in Note 7 of the General Notes.*

***E. Cover Required***

*The minimum cover for all watermains from top of pipe to finished grade will be thirty (30) inches for ductile iron pipe unless otherwise approved.*

***F. Connection to Existing Watermains***

*The developer's engineer will be responsible for determining the scope of work for connection to existing watermains. A minimum of Two business days advance notice to the Water Division is needed to schedule shutdowns. However, shutdowns cannot be scheduled until Water/Sewer/Stormwater Application has been approved and all applicable fees have been paid in full. The City of Napavine Water Division will be consulted regarding fittings or couplings required. It will be the contractor's responsibility to verify the location and depth of the existing main and the fittings required to make the connections to the existing main. All excavation, connections, piping, tapping valve fittings, services, anchors, blocking, bedding, backfill, compaction, restoration and the labor and materials required will be furnished and placed by the contractor. The tapping of an existing watermain will be done in the presence of Water Division representative. The Water Division will be given two (2) business days' advance notice of a water main tap and they will perform all shutdowns on existing mains.*

*4.04 Service Interruption*

*The contractor will give the Public Works Department a minimum of five (5) business days advance notice of any planned connection to an existing pipeline. This includes all cut-ins and live taps. Notice is required so disruptions to existing services can be scheduled and affected customers notified. The contractor will make every effort to schedule watermain construction with minimum disruption of water service. The contractor is responsible for ensuring that the excavation and shoring procedures comply with L & I Standards for worker safety. If these procedures are not followed. the connection will not be performed.*

*4.05 Hydrants*

A. *The lead from the service main to the fire hydrant will be ductile iron cement mortar lined Class 52, no less than six (6) inches in diameter. A gate valve will be installed a minimum of three (3) feet from the hydrant, unless otherwise approved.*

B. *Fire hydrants will have two, 2-1/2-inch outlets with National Standard threads and one, 4-inch pumper port outlet with Pacific Coast threads (male threaded 4.72-inch diameter). The pumper port will be fitted with a 5-inch quick connect Storz Adapter with a Pacific Coast thread hydrant connection (female threaded 4.75-inch diameter). The Storz Adapter will include a cap. The hydrant valve opening will be 5¼-inch diameter. The hydrant will have a positive and automatic barrel drain and will be of the "safety" or breakaway style.*

*Hydrants will be Manufacturer M & H Style 929*

*Alternate hydrant styles and manufacturers will be considered on a case-by-case basis and must be approved by the Director of Public Works. All hydrants will be bagged and the connecting gate valves will remain closed until the system is tested and approved. Developments being served by existing hydrants will be required to upgrade to these Standards and use the same type of hydrant throughout the development. Hydrants will be painted with sunburst yellow high-grade enamel after installation.*

C. *The Department of Public Works and The Napavine Fire Services will work together to determine the required hydrant spacing for installation. All hydrants will be installed and placed in a manner that provides accessibility to Police and Fire Services and their equipment as determined by both departments.*

   *Unless otherwise required by the Public Works Department, the following guidelines will apply for hydrant number and location:*

   1. *At least one hydrant will be installed at all intersections.*
   2. *Hydrant spacing of 200,feet will be required in all areas except single family and duplex residential areas.*
   3. *Hydrant spacing of 300 feet will be required for single family and duplex residential areas.*
   4. *The spacing distance for hydrants will be measured along the frontage street(s) and/or accessible side street(s) only. When determining the sufficiency of existing hydrants related to hydrant placement and spacing, hydrants located behind or on parallel streets or alleys, or hydrants with flows less than the minimum fire flows listed in Section 4.03A will not be considered.*
   5. *When any portion of a proposed building is in excess of 150 feet from a water supply on a public street or right-of-way, privately owned on- site hydrants will be required. Such hydrants will be located per Napavine PW Dept. and Fire Services and the Uniform Fire Code. The hydrants will be privately maintained and will include the appropriate metering and backflow prevention, as noted in these Standards. A proposed maintenance schedule will be submitted to the city for review prior to final approval of the engineering plans.*

D. *Fire hydrants will be installed as detailed in Standard Drawing 4-8.*

E.

F. *When necessary, the Public Works Department may require hydrants to be protected by two or more posts, 4-inch diameter x 5 feet high made of either reinforced concrete or steel.*

G. *Fire hydrants must be installed, tested, and accepted prior to the issuance of a Certificate of Occupancy.*

*4.06 Valves*

*All valves and fittings will be ductile iron with ANSI flanges or mechanical joint ends. All existing valves are to be operated by city employees only.*

*Valves will be installed in the distribution system at sufficient intervals to facilitate system repair and maintenance, but in no case will there be less than one valve every 1,000 feet. Generally, there will be two (2) valves on each tee and three (3) valves on each cross. Specific requirements for valve spacing will be made at the plan review stage.*

A. *Gate valves will be used on all 2 to 12-inch lines. The design, Materials and workmanship of all gate valves will conform to the most recent revision of AWWA C509-87. Gate valves will be resilient wedge non-rising stem (NRS) with two (2) internal O-ring stem seals. Gate valves will be Mueller. M & H, Kennedy, Clow R/W or Waterous Series 500.*

B.

C. *Valve Box. All values will have a standard Armor Access Box numbers SP- Al 11037= SP-Al 11051: SP-CIFULLFLGRMG, SP-CIWATERLID determined by the Water Division. If the city approves or requires the use of an Olympic 91 valve box: it will be set to grade with a 6-inch ASTM 3034 SOR 35 PVC riser from valve to approximately six (6) inches from the valve box top. If valves are not set in a paved area: a 3 x 3-foot concrete pad: 4 inches thick will be set around each valve box at finished grade. An Armor Access valve box will be required for all locations of heavy traffic. In areas where the valve box is on the shoulder of the road: the ditch and shoulder will be graded before placing an asphalt or concrete pad. Valve box lids will be ductile iron, anti-kickout: and marked "WATEK: (See Standard Drawing 4-12) AH valve locations will be marked on the face of the adjacent curb with an "WV" embossed 1/4-inch into the concrete.*

*4.07 Casing*

*Steel casing pipe will be schedule 20 steel or equal. Pipe spacers will have 8- inch runners. Casting pipe and spacers will be sized for pipe being installed with a minimum of three (3) spacers per section of pipe. The casing pipe wilt then be sand-packed and sealed in accordance. with the spacer manufacturer's recommendations.*

*4.08 Air and Vacuum Release Valve*

*Air and vacuum release valves (ARV) will be APCO combination air release valves. Installation will be as shown on Standard Detail 4-9.*

*The installation will be set at the high point of the line when required. Where possible, pipes are to be graded to prevent the need for an air release valve. Air release valves may not be required when services are in the vicinity; however, the Director of Public Works will make the final determination.*

*4.09 Blowoff Assembly*

*If a fire hydrant is not located at the end of a dead-end main, a blowoff assembly will be required. On water mains that may be extended in the future, the valve that operates the blowoff assembly will be the same size as the main and provided with a saddle block along the last length of the pipe preceding the valve, in lieu of a thrust block at the end. The working pressure rating for blowoff assemblies will be a minimum of 200 psi. Installation will be as shown on Standard Drawing 4-10. To be determined by Public Works Director.*

*4.10 Backflow Prevention*

*All water system connections providing buildings or properties with domestic potable water, fire suppression or irrigations systems, will comply with the backflow prevention requirements as established by the Department of Health (DOH) WAC and the City of Napavine Cross-connection Control Program.*

*Having an approved backflow assembly(s) installed is necessary to protect the city water system and all users from any possible contamination. All backflow assemblies installed will be of a type and model pre-approved by DOH or the city. No cross-connections will be created, installed, used,*

*or maintained within the City of Napavine water system. A list of approved testers may be obtained from the Washington Environmental Training Resource Center (WETRC) located in Auburn, Washington.*

*In-premises cross-connections must have an approved backflow assembly(s) in place in accordance with the Uniform Plumbing Code (UPC). The city may require additional in-premises and/or premises protection in accordance with DOH and the City of Napavine Cross-Connection Control Plan when health hazards are determined to exist.*

*All assemblies must be installed in accordance with the most recent versions of the -City of Napavine -Cross Connection Control Program, DOH, UPC. and the PNWSIAWWA Cross-Connection Control Manual. In addition, all assemblies must be inspected and approved by the city's Cross-Connection Specialist (CCS). The CCS may also conduct an on-site inspection of new and/or existing backflow assemblies during testing. The city will release or issue a Certificate of Occupancy only after all backflow assemblies have passed a certified test.*

*Any person violating any provision of the City of Napavine Cross-Connection Control of Plan will be subject to penalties as stated under the Napavine Municipal Code.*

***A. Backflow Assemblies***

*The definitions, abbreviations and acronyms relating to cross-connections frequently used in cross connection control are found in the Washington State Department of Health Water System Design Manual as applies to "Group A" public water systems. Accepted backflow prevention assemblies are RPBA1 RPDA. DCVA, DCDA, PVBA or SVBA of a make, model, and size that has been approved by DOH. Assemblies on the current approved backflow prevention assemblies list developed by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research are also approved.*

***B. Installation Requirements***

*Backflow prevention assemblies used for premises isolation will be installed at the expense of the user, downstream from the city's water metering device, but within six (6) feet of the meter box or before any other use connection. to protect the water distribution system from any potential hazard, as determined by the city. All assemblies must be installed in accordance with the most current versions of the City of Napavine Cross-Connection Control Plan, DOH requirements. UPC, and the PNWSIA WWA Cross-Connection Control Manual.*

*In-premise installation of backflow assemblies can be installed only with written permission by the city's CCS or may be mandated along with premises isolation when high health hazards are determined to exist by the CCS. All backflow assemblies (premises or in-premises) must be readily accessible to city personnel during regular working hours of 8:00 a.m. to 4:30 p.m. If there is a change of ownership of an in-premise backflow assembly and/or at any time all requirements are not met, the City of Napavine has the right to enforce premises isolation and will follow the procedures established in the City of Napavine Cross-Connection Control Plan. The City of Napavine must be notified within two (2) business days of the completion of a backflow assembly installation. Upon notification, the city's CCS will then inspect the installation to determine compliance with all applicable requirements.*

*All backflow assembly installations are also required to be tested by a Washington State DOH-certified Backflow Assembly Tester (BAT) with an annual certificate of accuracy for their testing*

*equipment on file with the city. The test results must be sent to the city showing the backflow assembly having successfully passed the certified test. The property owner must schedule a backflow test annually.*

***C. Costs of Compliance***

*All costs associated with purchase. installation, inspections, testing, replacement, maintenance, parts, and repairs of a backflow assembly are the responsibility of the property owner/user.*

***D. Termination of Services***

*Failure on the part of any customer to correct all cross-connections in accordance with these Standards is sufficient cause for the immediate discontinuance of public water service to the premises.*

*4.11 Service Connection*

A. *All service connection sizes used for new development will be determined by industry standards and approved by the Director of Public Works and installed by the developer at the time of mainline construction. After the lines have been constructed. tested and approved, the owner may request a water meter. The city will install a water meter only after a Water/Sewer/Storm Application has been completed, all applicable fees paid, and the system inspected and approved.*

B. *When water is desired for a parcel fronting an existing main but not served by an existing setter, a Water/Sewer/Storm Application must be completed and returned to the city. Upon approval of the application and payment of all applicable fees, the city will tap the main, and install the meter, box, and setter.*

C. *Service lines will be 200 class poly pipe. All connections will be of Ford. McDonald or Mueller 110 compression connection fittings. Service Lines will be installed a minimum of 22 ½ degrees off the main. Tracer tape will be installed over all service lines.*

   *Service saddles will be ductile iron with double stainless-steel traps. All clamps will have rubber gasket and iron pipe threaded inlet, and iron pipe threaded or approved compression outlet connections.*

   *Corporation stops will be all U.S. brass and will be Ford. Mueller: or A.Y. McDonald with iron pipe (IP) threads conforming to AWWA C800. Stainless steel inserts will be used with pack joints or Mueller.*

D. *Master meters will not be allowed for service to more than one building. An approved backflow prevention system must be installed in conjunction with any master meter= in accordance with the requirements outlined in this chapter.*

*4.12 Marking Service Lines*

*The location of any service Lines will be marked on the face or top of the cement concrete curb with a "W" embossed ¼-inch into the concrete.*

*4.13 Watermain/Sanitary Sewer Crossings*

*The contractor will maintain a minimum of eighteen (18) inches of vertical separation between sanitary sewers and watermains - with the watermains being at the higher elevation. If the*

*minimum vertical separation cannot be met. the standards for water/sewer separation from the DOE Guidelines as shown on the following page will apply.*

*The longest standard length of water pipe will be installed so that the joints will fall equidistant from any sewer crossing. In cases where minimum separation cannot be maintained, it may be necessary to utilize watermain-rated pipe for the sewer line, or to encase the water pipe and/or sewer line in pipe or concrete. No concrete will be installed unless specifically directed by the Director of Public Works.*

*WATER/SEWER SEPERATION DETAIL DEPARTMENT OF ECOLOGY GUIDELINES FIGURE 1*

Table 1

WATERMAIN STANDARD PIPE MATERIAL

| TYPE OF PIPE | | AWWA(ASTM) | STANDARD |
|---|---|---|---|
| | PIPE | JOINT | FITTINGS |
| Ductile Iron | C151 & C104 | C111 | C110 |
| Asbestos-Cement | C400 (Type II) Class 200 | (D1869) | C110 |
| Polyvinyl Chloride | C900 | (03139 & | C110 |
| Concrete Cylinder | | | C303 |

*4.14 Irrigation*

*All irrigation systems will be installed with a backflow prevention assembly approved by the Department of Health or the City of Napavine Irrigation sprinklers will be situated so as to not wet any public street or sidewalk.*

*4.15 Staking*

*All surveying and staking will be performed by an engineering or surveying firm Licensed by the State of Washington and capable of performing such work. A pre-construction meeting will be held with the city prior to commencing staking and all staking will be inspected by the city prior to construction, and maintained throughout construction.*

*The minimum staking of waterlines will be as follows:*

A. *Stake centerline alignment every twenty-five (25) feet, (50 feet in tangent sections) with cuts and/or fills to bottom of trench maintaining the minimum required depth of cover over pipe. Centerline cuts are not required when road grade is to finished subgrade elevation.*

B. *Stake location of all fire hydrants, hydrant flange elevations, tees, water meters, setters and other fixtures with cut or fill to finished grade.*

*4.16 Trench Excavation*

A. *Clearing and grubbing, when required, will be performed within the easement or public right-of-way as permitted by the city and/or governing agencies. All debris resulting from clearing and grubbing must be disposed of, by the owner or contractor in accordance with the terms of the applicable permits.*

B. *Trenches will be excavated to the line and depth designated by the city to provide a minimum of thirty (30) inches of cover over the pipe and, to the extent practical, a maximum of forty-two (42) inches of cover over the pipe. Except for unusual circumstances where approved by the*

*city, the trench sides will be excavated vertically and the trench width will be excavated only to such widths as are necessary for adequate working space as allowed by the governing agency. The trench will be kept free from water until pipe assembly is complete. Surface water will be diverted so as not to enter the trench. The owner will maintain sufficient pumping equipment on the job to ensure that these provisions are carried out.*

C. *The contractor will perform excavation of every description and of whatever substance encountered including boulders, rocks. roots and other obstructions. All material will be entirely removed or cut out to the width of the trench and to a depth six (6) inches below watermain grade. Where materials are removed from below watermain grade, the trench will be backfilled to grade with thoroughly compacted material that is satisfactory to the city.*

   *Pipe placed in the trench will be sealed with a watertight plug at the end of each day. More frequent use of a watertight plug may be required at the discretion of the city.*

D. *Trenching and shoring operations will not proceed more than 100 feet in advance of pipe laying without approval of the city, and will be in conformance with Washington Industrial Safety and Health Administration (WISHA) and Office of Safety and Health Administration (OSHA) Safety Standards. The contractor will also maintain the presence of "competent person" as defined by the Washington State Department of Labor and Industries when any trench excavation and backfill work is being done at the project site.*

E. *The bottom of the trench will be finished to grade with hand tools in such a manner that the pipe will have bearing along the entire length of the barrel. The bell holes will be excavated with hand tools to sufficient size to make up the joint.*

*4.17 Thrust Blocking*

*Location of thrust blocking will be shown on plans. Thrust block concrete will be Class B poured against undisturbed earth. A plastic barrier will be placed between all thrust blocks and fittings. The city may require the use of MEGALUG restrainers, Romac retainers or restraining rods in lieu of concrete thrust blocking. See Standard Detail number 4-13 and 4-14 for thrust block locations and calculations.*

*4.18 Backfilling*

*Backfilling will not commence until the pipe installation has been inspected and approved by a representative from Public Works. Backfilling and surface restoration will closely follow installation of pipe so that not more than 100 feet is left exposed during construction hours without approval of the city.*

*Selected bedding material conforming to WSOOT/APWA Standard Specifications will be placed and compacted around and under the watermains by hand tools to a height of six (6) inches above the top of the watermain. The remaining backfill will be compacted to 95 percent of the maximum density in traveled areas, 90 percent outside traveled area. The city will have the discretion of requiring the use of control density fill (GDF) for backfill material for road crossings.*

*Where governmental agencies other than the city have jurisdiction over roadways, the backfill and compaction will be done to the satisfaction of the agency having jurisdiction, but in no case will the backfilling or compaction be to a lower standard than that of the city. If suitable backfill material, as determined by the city, is not available from trenching operations, the city may require the placement of bedding and/or a gravel base conforming to the current WSOOT/APWA Standard Specifications.*

*4.19 Street Patching and Restoration*

*See Sections 2B.15 and 2B.16 of these Standards for requirements regarding street patching and trench restoration.*

*4.20 Hydrostatic Tests*

*Prior to the acceptance of work, installation will be subject to a hydrostatic pressure test by the contractor. All pumps, gauges, plugs, saddles, corporation stops, miscellaneous hose and piping, and measuring equipment necessary for performing the test will be furnished and operated by the contractor. Tests will be conducted only after all connections along the section to be tested have been made and the roadway section is constructed to subgrade.*

*The section of watermain being tested will be filled with water and allowed to stand under pressure for a sufficient length of time to allow air to escape and the pipe lining to absorb water. The contractor will be responsible for all costs, labor and materials associated with the testing of the line. The contractor will pay for all water needed for testing at the current rate charged by the city.*

*The test will be accomplished by pumping the main up to a pressure loops i above normal operating pressures but in no case will the test pressure be less than 150 psi. After reaching the test pressure, the pump will be stopped for fifteen (15) minutes and then the pressure brought back up to the test pressure again. The quantity of water used to restore the pressure will be accurately determined by pumping through a positive displacement waler meter. The meter will be approved by the Public Works Department prior to testing.*

*Acceptability of the test will be determined by using the following formula:*

$$L = \frac{N \times D \times (P"1/2)}{7400}$$

*L = allowable leakage. gallons per hour (gph)*

*N = number of joints in the length of pipeline tested*

*D = nominal diameter of pipe, inches*

*P = average test pressure during the leakage test. psi*

*If the water used to restore the pressure in the system is greater than the allowable leakage determined by the formula, the main will be considered to have failed. There will not be any appreciable or abrupt loss in pressure during the fifteen (15) minute test period. Any significant loss will also be grounds for a non-passing test. Should the tested section fail to pass the pressure test as specified, the contractor will, at no expense to the city, locate and repair the defects and then re-test the pipeline. All tests will be made with the hydrant auxiliary gate valves open and pressure against the hydrant valve. After the test has been completed, each gate valve will be tested individually by closing each in turn and relieving the pressure beyond. This test will be acceptable if there is no immediate loss of pressure on the gauge when the pressure comes against the valve being checked. The contractor will verify that the pressure across the valve does not exceed the rated working pressure of the valve.*

*Sections to be tested will normally be limited to 1,500 feet. The Director of Public Works may require that the first section of the pipe installed by the contractor, not less than 1,000 feet in length, be tested in order to qualify the crew and the material. Pipe installation will not be*

*continued for more than an additional 1,000 feet until the first section has been successfully tested.*

*Prior to calling a Public Works representative to witness the pressure test, the contractor will have all equipment ready for operation and have successfully performed the test to ensure that the pipe is in satisfactory condition.*

*Defective material or workmanship discovered during a hydrostatic field test will be replaced by the contractor at no expense to the city. Whenever it is necessary to replace defective material or correct workmanship, the hydrostatic test will be re-run at the contractor's expense until a satisfactory test is obtained. Test pressure will be maintained while the installation is inspected by the city. See Section 4.10A of this chapter for testing responsibilities related to backflow prevention devices.*

*4.21 Sterilization and Flushing*

*Sterilization of watermains will be accomplished by the contractor in accordance with the requirements of the Washington State Department of Health, AWWA Standards and in a manner approved by the city. At no time will chlorinated water from a new main be flushed into a body of water, including lakes: rivers, streams, drainage ways, and all waters where fish or other natural water life can be expected. Any discharge into a city sewer system must be approved, in advance and in writing by the Public Works Director*

*When the proper chlorine concentration has been established throughout the line, the valves will be closed and the line left undisturbed for twenty-four (24) hours. The line will then be thoroughly flushed and water samples taken by the city at least twenty-four (24) hours after flushing and disinfecting. Sampling collection should be scheduled with the Public Works Department at least two (2) business days in- advance. Should the initial chlorine treatment result in an unsatisfactory bacteriological test, the procedure must be repeated until satisfactory results are obtained. The contractor will be responsible for all costs if re-testing becomes necessary. Samples can only be taken on Mondays and Tuesdays. Testing and sampling will take place after all underground utilities are installed and compaction of the backfill within the roadway section is complete.*

**FINDING:** This standard applies. This submitted site plan and application materials identify water service connections and main lines.

**CONDITION OF APPROVAL: Prior to engineering approval, water utility plan sheets and details meeting applicable standards of Chapter 4 shall be submitted for review and approval by the City.**

**CONDITION OF APPROVAL: Prior to construction, all the water system materials and methods shall be reviewed by City for compliance with applicable standards.**

*CHAPTER 5 SANITARY SEWER*

*5A GENERAL CONSIDERATIONS*

*5A.01 General*

*Sanitary sewerage refers to wastewater derived from domestic, commercial and industrial pretreated waste to which storm, surface, and ground water are not intentionally admitted. Pretreatment will follow all the requirements as set forth by city ordinances and Public Works Departmental policies.*

*Any extension of the City of Napavine Sanitary Sewer System must be approved by the Public Works Department and must be consistent with the City of Napavine Comprehensive Plan: City of Napavine General Sewer Plan, Department of Ecology, and Department of Health requirements.*

*Within the corporate city limits where public sewer is available it must be used. Connection is not required provided that the sewage from the structure originates more than 200 feet from the public sewer, except in the case of private residential or commercial developments where the developed property abuts a right-of-way in which a public sewer is located or where a service connection is otherwise provided. In this case, connection of all structures generating sewage will be required to connect to the public sewer regardless of distance.*

*Anyone who wishes to extend or connect to the city sewer system will contact the Public Works Department for a Water/Sewer/Storm Application. If a sewer line extension is being requested, a written request that specifically lists and details the line extension must be submitted to the Public Works Department. After the Water/Sewer/Storm Application is returned to the Public Works Department along with a written request and/or any other information as may be required or requested. City staff will determine costs or estimated costs and/or address council and other approvals as may be required.*

*See Chapter 1, Section 1.02 for definitions of specific sewers. Maintenance of the building sewer will be the responsibility of the property owner while the remaining sewer lateral will be the city's responsibility.*

*5A.02 Marking Side Sewers*

*The location of all side sewers will be marked on the face or top of the cement concrete curb with an "S" embossed ¼-inch into concrete.*

*5A.03 Sanitary Sewer/Watermain Crossings*

*See Chapter 4.13 for requirements regarding sewer and water separation.*

*5A.04 Staking*

*All surveying and staking will be performed by an engineering or surveying firm licensed by the State of Washington and possessing the appropriate business license(s) to perform such work.*

*A pre-construction meeting will be held with the Public Works Department prior to commencing staking. All construction staking will be inspected by the city prior to construction. Staking will be maintained throughout construction.*

*The minimum staking of sewer lines will be as follows:*

A. *Centerline alignment must be staked with cuts and/or fills to flow at twenty-five (25) feet and fifty (50) feet from each manhole or structure and every fifty (50) feet thereafter, unless more frequent staking is required for construction at the discretion of a Public Works representative.*
B. *Manholes must be staked with hubs to include invert elevations of all pipes and top of rim elevations to finished grade.*
C. *Location of valves. fixtures and septic tank will be staked for force mains and STEP systems.*

*5A.05 Trench Excavation*

*See Chapter 4, Section 4.16 for requirements regarding trench excavation.*

*5A.06 Backfilling*

*See Chapter 4, Section 4.1B for requirements regarding backfilling.*

*5A.07 Street Patching and Restoration*

*See Chapter 2, Sections 2B.15 and 2B.16 for requirements regarding street patching and trench restoration.*

*5A.08 Testing*

*Prior to acceptance and approval of construction, the following tests will apply to each type of construction.*

*A. Gravity Sewer*

1. *After the pipes have been cleaned, and prior to acceptance of the project, the gravity sewer line will be subject to a low pressure air test per WSDOT/APWA Standards. The contractor will furnish all equipment and personnel for conducting the test under the observation of a representative from the Public Works Department. The testing equipment will be subject to approval of the Public Works Department.*

   *Prior to calling a Public Works representative to witness the test, the contractor will have all equipment ready and have successfully performed the test. The air test for acceptance will be made after trench is backfilled and compacted and the roadway section is completed to sub-grade.*

   *All wyes, tees, and end of side sewer stubs will be plugged with flexible joint caps, or acceptable alternates! securely fastened to withstand the internal test pressures. Such plugs or caps will be readily removable and their removal will provide an opening suitable for a lateral connection or extension that conforms to these Standards.*

2. *Testing of the sewer main will include a television inspection by the contractor conducted under the direct supervision of a Public Works representative. Failure to have a Public Works representative present will invalidate the test and the test will be repeated at the contractors expense. Television inspections will be done after. the air test has passed, the manhole has been channeled and before the roadway is paved. Immediately prior to the television inspection, enough water will be run down the line to come out the lower manhole. A sediment trap will be installed in the downstream manhole prior to flushing the line. The sediment trap and all the material it collects will be removed before the line is placed into service. A copy of the video and a written report will be submitted to the Public Works Department. Acceptance of the line will be made after the tape has been reviewed and approved by the Public Works Department inspector. Any connection to an existing system will need to be televised as well.*

   *The city may televise the new sewer Line during periods of high groundwater within the first year after acceptance of the line. Any conditions resulting in inflow and infiltration (I & I) will be considered a system failure that will be repaired by and at the expense of the contractor.*

3. *A vacuum test of all manholes is required prior to acceptance. The structure will be tested in accordance with ASTM-C 1244- 93. This test method covers procedures for testing cast-in-place or pre-cast concrete manhole sections, using the vacuum test method to demonstrate the integrity of the installed materials and construction procedures.*

*Testing will be in the following manner:*

a. *All lift holes and pipes entering into the manhole will be plugged, taking care to securely brace each plug from being drawn into the structure.*

b. *The test head will be placed at the top portion of the structure in accordance with the manufacturer's recommendations.*

c. *A vacuum ·of ten (10) inches of mercury will be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pump shut off. With the valves closed, the time will be measured for the vacuum to drop by one (1) to nine (9) inches. The manhole will pass the vacuum test if the time is greater than the time shown in TABLE-1 below.*

**Table 1. Minimum Test Times for Various Manhole Diameters**

| Depth in Feet | Diameter in Inches | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **30** | **33** | **38** | **42** | **48** | **54** | **60** | **66** | **72** |
| | ***Time in Seconds*** | | | | | | | | |
| **8** | 20 | 20 | 20 | 20 | 20 | 23 | 26 | 29 | 33 |
| **10** | 20 | 20 | 20 | 21 | 25 | 29 | 33 | 36 | 41 |
| **12** | 20 | 20 | 21 | 25 | 30 | 35 | 39 | 43 | 49 |
| **14** | 20 | 21 | 25 | 30 | 35 | 41 | 48 | 51 | 57 |
| **16** | 22 | 24 | 29 | 34 | 40 | 46 | 52 | 58 | 67 |
| **18** | 25 | 27 | 32 | 38 | 45 | 52 | 59 | 65 | 73 |
| **20** | 28 | 30 | 35 | 42 | 50 | 53 | 65 | 72 | 81 |
| **22** | 31 | 33 | 39 | 46 | 55 | 64 | 72 | 79 | 89 |
| **24** | 33 | 36 | 42 | 51 | 59 | 64 | 78 | 87 | 97 |
| **26** | 36 | 39 | 46 | 55 | 64 | 75 | 85 | 94 | 105 |
| **28** | 39 | 42 | 49 | 59 | 69 | 81 | 91 | 101 | 113 |
| **30** | 42 | 45 | 53 | 63 | 74 | 87 | 98 | 108 | 121 |

*TABLE 1 gives allowable time in seconds, i.e., test section is acceptable if vacuum does not drop below nine (9) inches. until after the times shown below have expired.*

d. *If the manhole fails the initial test, necessary repairs will be made by an approved method. The structure will then be re-tested until a satisfactory test is obtained.*

e. *If the manhole joint is displaced during the vacuum test, the manhole will be disassembled, the seal replaced, the structure reassembled, and re-tested until compliance is obtained.*

f. *Testing can be done either before or after backfill operations around the structure; however; if during backfill operations it is found that the structure has been disturbed and it is suspected that the integrity of the joint has been compromised, re-testing will be required.*

g. *All other requirements stipulated in Section 7-05 of the most recent edition of the Washington State Department of Transportation Standard Specifications for Road,*

*Bridge, and Municipal Construction, that has been adopted by the city, will also be adhered to for final acceptance of the manhole structure.*

4. *A mandrel test in accordance with Section 7-17.3(4)H of the WSDOT/APWA Standard Specifications will be performed by and at the expense of the contractor on all sewers except laterals (as defined in Chapter 1 of these Standards) when televising reveals a possible defect or belly in the pipe.*
5. *Any time that testing reveals problems that lead to repairs by the contractor, the city may require a complete re-testing of the entire system. The re-test will be required to ensure that the integrity of the system was not compromised during the repair work.*

B. *Force Main*

1. *Prior roadway paving and final acceptance of the project, the pressure and service Lines will be subjected to a hydrostatic pressure test of 100 lbs. per square inch for fifteen (15) minutes and any leaks or imperfections which develop under said pressure will be remedied by the contractor. No air will be allowed in the line. The main will be tested between valves. Insofar as possible, no hydrostatic pressure will be placed against the opposite side of the valve being tested. The pressure test will be maintained while the entire installation is inspected.*

   *The contractor will provide all necessary equipment and will perform all work connected with the tests. Tests will be made after all connections have been made. This is to include any and all connections as shown on the plan. The contractor will perform all tests to ensure that the equipment to be used for the test is adequate and in good operating condition and the air in the line has been released before requesting a Public Works representative to witness the test.*

2. *A water test for all wet wells in accordance with the manhole water test for "Gravity Sewers" will be required.*
3. *A mandrel test in accordance with Section 7-17.3(4)H of the Standard Specifications may be required, at the discretion of the Director of Public Works.*
4. *The contractor must provide verification of operating parameters such as pump operation, alarms, and electrical inspection. inspections are to be conducted in the presence of a Public Works representative. The final verification will be documented in a written report that will be submitted to the city for review and approval prior to acceptance of all lift stations.*

C. *STEP System*

1. *Prior to final acceptance of the project the pressure mainline and service lines will be subject to a hydrostatic pressure test of 200 lbs. for 15 minutes and all leaks or imperfections that develop, will be remedied by the contractor. No air will be allowed in the line. The main will be tested between valves. Insofar as possible= no hydrostatic pressure will be placed against the opposite side of the valve being tested. The pressure test will be maintained while the entire installation is inspected.*

   *The contractor will provide all necessary equipment and will perform all work connected with the tests. Tests will be made after all connections have been made. The contractor will perform all tests to assure that the equipment to be used for the test is. adequate and in good operating condition and the air in the line has been released prior to requesting a Public Works representative to witness the test.*

2. *A water test of the STEP tank at the factory and on-site after installation, is required in accordance with the criteria outlined in SE.07 of this Chapter. The contractor will perform the test and supply all necessary equipment and materials. The testing will be conducted in the presence of a Public Works representative. Tests will commence by 3:00 p.m. to ensure adequate time for testing to be conducted during the standard workday.*
3. *The contractor must provide verification of operating parameters such as pump operation. alarms, and electrical inspection. Inspections are to be conducted in the presence of a Public Works representative. The final verification will be documented in a written report that will be submitted to the city for review and approval prior to acceptance of all STEP systems.*

*5A.09 Design Standards*

*The General Notes on the following pages will be included on all plans dealing with sewage system design. In addition, the specific notes with gravity sewer and STEP systems will be included when these utilities are part of the project.*

***General Notes (Sanitary Sewer Main installation)***

1. *All workmanship and materials will be in accordance with City Napavine Standards and the most recent copy of the State of Washington Standard Specifications for Road, Bridge and Municipal Construction (WSDOT.IAPWA).*
2. 
3. *All approvals and permits required by the City of Napavine will be obtained by the contractor prior to the start of construction.*
4. *If construction is to take place in the County right-of-way, the contractor will notify the County and obtain all the required approvals and permits.*
5. *A pre-construction meeting will be held with a Public Works Department representative prior to the start of construction.*
6. *The Public Works Department will be notified a minimum of two (2) business days in advance of a tap connection to an existing main. A Public Works representative will be present at the time of the tap.*
7. *The contractor will be fully responsible for the location and protection of all existing utilities. The contractor will verify all utility locations prior to construction by calling the Utilities Underground Location Center at 1-800-424-5555 a minimum of two (2) business days prior to any excavation.*
8. *All sewer mains will be field staked for grades and alignment by a licensed engineering or surveying firm qualified to perform such work. Staking will be maintained throughout construction.*
9. *All pipe and services will be installed with continuous tracer tape placed twelve (12) to eighteen (18) inches under the proposed finished subgrade. The marker will be of plastic non-biodegradable, metal core or backing marked "SEWER" that can be detected by a standard metal detector. If visibility cannot be maintained between structures along the straight alignment of a sewer. toning wire will be installed above the sewer line at a depth no greater than 48 inches. Tape will be Terra Tape "D" or an approved equal. Jn addition, STEP mains. force mains, and curvilinear sewers will be installed with toning wire taped to the top of the pipe to prevent movement during backfill.*

*If toning wire is required, it will be UL -listed, type UF, 14-gauge copper. The wire will be laid loosely enough to prevent stretching and damage. The wire will be wrapped to a manhole or cleanout rings on gravity sewer or valve body on STEP mains.*

*A 1-lb magnesium anode will be buried with the pipe every 1,000 linear feet maximum for cathodic protection of the wire. Toning wire splices and connections to anodes will join wires both mechanically and electrically and will employ epoxy resin or heat-shrink tape insulation. Toning wire will be tested prior to acceptance of the pipe-system. A written notice from the contractor to the city two (2) business days prior to testing is required. On a curvilinear sewer, the wire will be brought up: bared and wrapped three (3) times around the manhole ring. The tape and wire will be furnished and installed by the contractor.*

10. *Bedding of the sewer main and compaction of the backfill material will be required in accordance with the above specification. (See General Note 1)*
11. *All manholes and cleanouts outside the paved area will be installed in accordance with Standard Drawings 5.3 and 5.5.*
12. *When temporary street patching is allowed by the city, cold mix asphalt will be placed to a maximum depth of one (1) inch. The contractor will be responsible for maintenance as required by the city.*
13. *Erosion control measures conforming to the most recent version of the City of Napavine Stormwater Management Plan and Chapter 3 of these Standards will be taken by the contractor during construction to prevent infiltration of existing and proposed storm drainage facilities and roadways.*
14. *Provide traffic control plan(s) in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) as required.*
15. *It will be the responsibility of the contractor to have a copy of the approved construction plans on-site at all times. "Approved" plans are typically signified by the signature of the Director of Public Works.*
16. *Any changes to the design will first be reviewed and approved by the developer's project engineer and then the Director of Public Works prior to implementation.*
17. *Prior to backfill, all mains and appurtenances will be inspected and approved by a Public Works representative. Approval does constitute final acceptance of the sewer line. The contractor will retain responsibility to repair all deficiencies and failures revealed during all required testing for acceptance and throughout the duration of the warranty. It is the contactors responsibility to notify the Public Works Department in advance of all required inspections. Any main or appurtenance backfilled prior to inspection will be re-excavated for inspection at no cost to the city.*

*GRAVITY SEWER*

1. *Gravity sewer mains will meet the following:*

   *PVC pipe will conform to ASTM P 3034 SOR 35, ASTM F 794, or ASTM F 679 Type 1 with joints and gaskets conforming to ASTM 3212.and ASTM F 477.*

2. *Pre-cast manholes will meet the requirements of ASTM C 478. Manholes will be Type 1-4811 as specified on the plans. Joints will be rubber gasket conforming to ASTM C 443 and will be grouted from the inside. Lift holes will be grouted from the outside and inside of the manhole (see General Note 1).*

3. *Side sewer services will be PVC, ASTM D 3034 SOR 35 with flexible gasket joints. Side sewer connections will be made by a saddle tap to an existing main, (see Standard Drawing 5-12), or a sanitary tee from a new main connected above the spring line of the pipe. Side sewer services will be installed according to applicable Standard Detail(s).*
4. *All side sewer locations will be marked on the face of the curb with an "S" embossed ¼-inch into the concrete.*
5. *All lines will be high velocity cleaned, televised, and subjected to a low pressure air test per current WSDOT/APWA Specifications after backfilling, but prior to paying (see General Note 1). Hydrant flushing of lines is not an acceptable cleaning method. Testing of the sanitary sewer main will include television inspecting of the main by and at the expense of the contractor in the presence of a Public Works representative. Immediately prior to television inspecting enough water will be run down the tine to come out the lower manhole and the line is flushed clean. A copy of the video will be submitted to the Public Works Department. Acceptance of the line will be made after the tape has been reviewed and approved by the inspector. A test of all manholes in accordance with these Standards is also required. Testing will take place after all underground utilities are installed and compaction of the roadway subgrade is completed.*

*STEP SYSTEMS*

1. *All buried power for STEP systems will be installed according to all current and applicable electrical codes.*
2. *All buried power for STEP systems will be installed with continuous tracer tape installed twelve (12) inches above the buried power. The marker will be plastic non-biodegradable metal core backing marked 0 POWER." Tape to be furnished by the contractor.*
3. *All STEP mains will be hydrostatically tested at 100 PSIG for fifteen (15) minutes according to the methods for hydrostatic testing of waterlines in the most recent version of the WSDOT/APWA Specifications. All materials and labor are to be provided by the contractor. In addition, all STEP mains will be pigged in the presence of a Public Works representative, prior to placing the STEP main in service.*

*5B GRAVITY SEWER*

*5B.01 General*

*All sewers will be designed as a gravity sewer whenever physically and/or economically feasible or as outlined in the City of Napavine General Sewer Plan.*

*5B.02 Design Standards*

*The design of any sewer extension/connection will conform to these Standards, Department of Ecology's "Criteria of Sewage Works Design," and any applicable standards as set forth herein.*

*The Layout of extensions will provide for the future continuation of the existing system as determined by the city. See Section 1.16 for utility extension information.*

*New gravity sewer systems will be designed on the basis of an average daily per capita flow of sewage of not less than 100 gallons per day. See the following DOE Table on Design Basis for Sewage. This figure is assumed to cover normal infiltration, but an additional allowance will be made where condition are unfavorable. Generally, laterals and sub-main sewers should be designed to carry, when running full, not less than 400 gallon daily per capita contributions of sewage. When deviations from the foregoing per capita rates are used, a description of the*

*procedure used for sewer design will be submitted to the Public Works Department for review and approval.*

CRITERIA FOR SEWAGE WORKS DESIGN WASHINGTON STATE DEPARTMENT OF ECOLOGY

| Discharge Facility | Design Units | Flow* (gpd) | BOD (lb/day) | ss (lb/day) | Flow Duration (hr) |
|---|---|---|---|---|---|
| Dwellings | per person | 100 | 0.2 | 0.2 | 24 |
| Schools w/showers & cafeteria | per person | 16 | 0.04 | 0.04 | 8 |
| Schools w/o showers & w/cafeteria | per person | 10 | 0.025 | 0.025 | 8 |
| Boarding schools | per person | 75 | 0.2 | 0.2 | 16 |
| Motels @ 65 gal/person (rooms only) | per room | 130 | 0.26 | 0.26 | 24 |
| Trailer courts @ 3 persons/trailer | per trailer | 300 | 0.6 | 0.6 | 24 |
| Restaurants | per seat | 50 | 0.2 | 0.2 | 16 |
| Interstates or through highway restaurants | per seat | 180 | 0.7 | 0.7 | 16 |
| Interstate rest areas | per person | 5 | 0.01 | 0.01 | 24 |
| Service Stations | per vehicle serviced | 10 | 0.01 | 0.01 | 16 |
| Factories | per person per 8-hour shift | 15-35 | .03-.07 | .03-.07 | Operating period |
| Shopping centers | per 1,000 sq. ft. of ultimate floor space | 200-300 | 0.01 | 0.01 | 12 |
| Hospitals | per bed | 300 | 0.6 | 0.6 | 24 |
| Nursing Homes | per bed | 200 | 0.3 | 0.3 | 24 |
| Homes for the aged | per bed | 100 | 0.2 | 0.2 | 24 |
| Doctor's office in medical center | per 1,000 sq ft | 500 | 0.1 | 0.1 | 12 |
| Laundromats, 9 -12 machines | per machine | 500 | 0.3 | 0.3 | 16 |
| Community colleges | per student & faculty | 15 | 0.03 | 0.03 | 12 |
| Swimming pools | per swimmer | 10 | 0.001 | 0.001 | 12 |
| Theaters, drive-in type | per car | 5 | 0.01 | 0.01 | 4 |
| Theaters, auditorium type | per seat | 5 | 0.01 | 0.01 | 12 |
| Picnic areas | per person | 5 | 0.01 | 0.01 | 12 |
| Resort camps, day and night, with limited plumbing | per campsite | 50 | 0.05 | 0.05 | 24 |
| Luxury camps with flush toilets | per campsite | 100 | 0.1 | 0.1 | 24 |

•includes normal infiltration

*5B.03 Main Line - Gravity*

A. *Sewer mains will be sized for the ultimate development of the tributary area. Nothing will preclude the city from requiring the installation of a larger sized main if the city determines a larger size is needed to meet the requirements for future service.*

   *The minimum size for mains will be eight (8) inch inside diameter.*

   *The minimum size for a lateral will be four (4) inches.*

B. *Sewer mains will be constructed using materials conforming to the following:*

   1. *PVC pipe six (6) to fifteen (15) inches in diameter must meet either ASTM D 30341 SOR 35 solid wall pipe, or ASTM F 794 for solid seamless profile pipe; or*
   2. *PVC pipe 18 to 27 inches diameter will conform to ASTM F679 Type 1 only.*
   3. *All joints for the PVC pipe will conform to ASTM D 3212 with rubber gaskets conforming to ASTM F 477.*

C. *Gravity sewer will maintain a minimum depth of five (5) feet unless otherwise approved, to provide gravity service to adjoining parcels and future areas to be served. adequate headroom within manholes for maintenance personnel and vertical clearance between water and sewer Lines. Actual depth will be determined by slope. flow. velocity and elevation of existing system.*

D. *All sewer lateral connections to the main will be made with a sanitary tee connection. A cleanout will be provided at the edge of the right-of-way as shown in Standard Drawing 5-10. The direct connection of sewer laterals to interceptors is strictly prohibited. All new mains connecting to existing mains will require the installation of a new manhole if not made at an existing manhole The city may require wyes at the upper extremity of a sewer line.*

E. *Slope*

   *All sewers will be designed and constructed to give mean velocities, when flowing full. of not less than 2.0 feet per second based on Mannings Formula using an "n" valve of 0.013. Use of other practical "n" values may be permitted by the Public Works Department if deemed justifiable on the basis of research or field data submitted. The following are minimum slopes, however, slopes greater than these are desirable.*

| Sewer Size (Inches) | Minimum % slope (Feet per 100') |
|---|---|
| 8 | 0.40 (0.0040 Ft/Ft) |
| 10 | 0.28 (0.0028 Ft/Ft) |
| 12 | 0.22 (0.0022 Ft/Ft) |
| 14 | 0.17 (0.0017 Ft/Ft) |
| 15 | 0.15 (0.0015 Ft/Ft) |
| 16 | 0.14 (0.0014 Ft/Ft) |

| | |
|---|---|
| 18 | 0.12 (0.0012 Ft/Ft) |
| 21 | 0.10 (0.0010 Ft/Ft) |
| 24 | 0.08 (0.0008 Ft/Ft) |
| 27 | 0.07 (0.0007 Ft/Ft) |
| 30 | 0.06 (0.0006 Ft/Ft) |
| 36 | 0.05 (0.0005 Ft/Ft) |

*Under special conditions, slopes slightly less than is required for the 2.0 feet per second velocity, may be permitted by the Director of Public Works. Such decreased slopes will only be considered where the depth of flow will be thirty (30) percent of the diameter or greater for design average flow. Whenever such decreased slopes are proposed, the design engineer will furnish the city with the plans and computations of the depths of flow at minimum, average, and daily or hourly rates of flow. Larger pipe will not be allowed to achieve lesser slopes. Sewers will be laid with uniform slope between manholes.*

*F. Gravity sewers will be designed with a straight alignment between manholes.*

*5B.04 Connection to Existing System*

*A. At connection to the existing system, all new sewer connections will be physically plugged until all tests have been completed and the city approves the removal of the plug.*

*B. Connection of new pipelines to existing manholes will be accomplished by using core-drilled holes. The transition of connecting channels will be constructed so as not to interrupt existing flow patterns. All connections will utilize Kor-N-Seal fittings. Manholes that contain knockouts will not be permitted for use as part of the city sewer collection system.*

*C. Connection of a pipeline to a- system without an existing manhole available, will be accomplished, by pouring a concrete base setting manhole sections. The existing pipe will not be cut into until approval is received from the city.*

*D. Connections to manholes requiring a drop will follow the criteria as outlined in Section 5B of this Chapter.*

*E. Connections where an existing stub-out is not available or where a new building sewer is the same size as the existing main will be accomplished by the installation of a new manhole.*

*F. Taps will be done by use of a core drill and will not be allowed to protrude into the existing main. A city inspector will be notified two (2) business days prior to any tap of a city sewer and will be present to witness the tap. The inspector will collect all tapping cores from the contractor, or will be informed if the cores were washed into the sewer.*

*5B.05 Manholes*

*Pre-cast manholes will meet the requirements of ASTM C 478 with either a pre-cast base or a cast-in-place base made from 3,000 psi structural concrete. Manholes will be Type 1, 48-inch diameter minimum. The minimum clear opening in the manhole frame will be twenty-four (24) inches. Joints will be rubber gasket conforming to ASTM 9 443 and will be grouted from the inside. Lift holes will be grouted from the outside and inside of the manhole.*

*Manholes constructed, of other materials may be approved by the Director of Public Works provided they meet the requirements of 2.318 of Department of Ecology's "Criteria for Sewage*

*Works Design." Material specifications need to be submitted for review before an alternate material will be considered. See Standard Drawings 5-1 and 5-2 for details.*

*Eccentric manhole cone will be offset so as not to be located in the tire track of a traveled lane.*

*Manhole frames and covers will be cast iron casting marked "SEWER" conforming to the requirements of ASTM A-30, Class 25, and will be free of porosity, shrink cavities, cold shuts, cracks, or any surface defects which would impair serviceability. Repairs of defects by welding or by the use of smooth-on or similar material will not be permitted. Manhole rings and covers will be machine-finished or ground-on seating surfaces so as to assure non-rocking fit in any position and interchangeability. Manholes located in areas subject to inflow will be equipped with an approved watertight manhole insert.*

*Where lock-type castings are called for, the casting device will be such that the cover may be readily released from the ring and all movable parts will be made of non-corrosive materials and otherwise arranged to avoid possible binding. The locking device will be made of a non-corrosive material or properly coated to protect against corrosion. All casting will be coated with a bituminous coating prior to delivery to the job site.*

*Safety steps will be fabricated of polypropylene conforming to an ASTM 0-4101 specification, injection molded around a ½-inch ASTM A-615 grade 60 steel reinforcing bar with anti-slip tread. Steps will project uniformly from the inside wall of the manhole. Steps will be installed 10 form a continuous vertical ladder with rungs equally spaced on 12-inch centers.*

*Manholes will be placed at standard maximum 400-foot intervals. and at changes in direction, grade or pipe size. Slope through the manhole will be 1/10th of one-foot from invert in to invert out unless otherwise approved by the Director of Public Works.*

*Where a smaller sewer joint joins a larger one, the invert of the larger sewer should be lowered sufficiently to maintain the same energy gradient. An approximate method for securing these results is to place the 80 percent depth point of both sewers at the same elevation. Pipe material will be consistent between manholes.*

*Straight grades between invert out of last manhole and connection to existing are preferred over drops whenever possible. Care must be taken when designing steep grades so as not to create a situation of excessive velocity or excavation. Grade changes associated with "sweeps" will not be allowed. The angle between the line(s) entering a manhole and the line leaving will be no less than 90 degrees.*

*An outside drop connection will be provided for a sewer entering a manhole at an elevation of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert will be filleted to prevent solids deposition. Outside drop structures will be constructed per Standard Drawing 5-4.*

*All manholes that are to be owned and maintained by the city will be accessible at all times to operations, maintenance equipment and vehicle. All-weather access drives may be required to provide a sufficient driving surface for city vehicles, at the discretion of the Director of Public Works.*

*5B.06 High Velocity Protection*

*Where velocities greater than fifteen (15) feet per second are expected, special provisions such as thrust blocking and specific piping materials will be made to protect against displacement and hydrogen sulfide gas.*

*5B.07 Cleanouts*

*Cleanouts are not an acceptable substitute for manholes, however they may be used in lieu of manholes at the end of 8-inch diameter lines of not more than 150 feet in length. Location of cleanout for building sewer !S governed by sewer ordinances as included in the Napavine Municipal Code and the Uniform Plumbing Code as adopted by the city.*

*AH cleanouts in a right-of-way will be extended to grade and a 3-foot square x 4-inch thick concrete pad will be installed around all cleanouts that are not in a pavement area. See Standard Drawing 5-5.*

*5B.08 Sewer Service to Private Properties*

*A building sewer refers to the extension from a building's discharge plumbing (two (2) feet outside of the building) to the edge of pavement or curb line and will have no other common sewers discharging into it. Building sewers will be a minimum diameter of four (4) inches for residential service and six (6) inches for all other services. Maintenance of the building sewer is the responsibility of the property owner.*

*A sewer lateral refers to the extension from the building sewer at the end of pavement or curb line to the sewer main. Sewer laterals will be a minimum diameter of six (6) inches. Maintenance of the sewer lateral is the responsibility of the city. Each property will be served by: an individual sewer lateral. In addition, each unit of a duplex will be served by separate laterals.*

*Prior to connection or installation of building sewers or sewer laterals, a Side Sewer Permit must be obtained from the Public Works Department. Materials and design criteria for a building sewer are covered by the Uniform Plumbing Code (UPS) as adopted by the city. Inspection of the sewer lateral and building sewer from two (2) feet outside the structure to the sewer main. the responsibility of the Public Works Department.*

*In order to avoid the possibility of backup in the sewer lateral from head pressures in the sewer main, the Director of Public Works may require that a backwater valve be installed at the property owner's expense. Operation and maintenance of the backwater valve will be the responsibility of the property owner.*

*5C LIFT STATIONS*

*5C.01 General*

*All lift stations will be designed to serve the appropriate basin as identified in the most recent version of the City of Napavine Sanitary Sewer Plan."*

*5C.02 Design Standards*

*The design of any Lift station will conform to City Standards. Department of Ecology's "Criteria for Sewage Works Design," and applicable standards as set forth here in Sections 1.01 and 1.11. Each lift station will be evaluated for buoyancy resistance using site-specific soil and groundwater information.*

*The following equipment, features, and special modifications are standard requirements for all permanent wastewater lift stations constructed as part of the city's wastewater conveyance system. The following requirements are minimum standards and not an inclusive:*

*A. General*

1. *The proponent of the lift station is required to provide the City of Napavine with a site located outside of the right-of-way. The land will be deeded to the city and will have sufficient area dimensions that allow for easy and safe access to the lift station.*
2. *A concrete slab, six (6) inches in depth, will surround the lift station well(s). with a minimum of two (2) feet of side exposure for all openings. The slab will be installed at ground level.*
3. *An access road, with easement, that will support 20,000 lb. axle loads throughout the year. will be provided from the nearest public road to the station, to allow for maintenance of the station.*
4. *Station entry access will be keyed to match all other city lift stations.*
5. *Entry lid to the station wet well will be located as close as 1 practical to the access drive. The lift stations will be accessible at all times to operations and maintenance equipment and vehicles.*
6. *Safety guards will be provided for an exposed drivelines and couplings.*
7. *Spare parts will be provided as recommended by the manufacturer, with a minimum of one (1) impeller. one (1) compete set of seals, filters and one (1) set of volute gaskets. Four (4) complete sets of O&M manuals, and a list of the nearest dealers for spare parts and repair will be provided. All replacement parts will be readily available from a distributor in the U.S.A.*
8. *The lift station will include at least two (2) pumps each one sized to handle all of the flow that the station will accept.*
9. *The pumps motor, and wet well will be in compliance with current engineering practice. They will be fully compatible as an assembly, and will be engineered for the specific service area.*
10. *All hardware and other basic mechanical parts (not including piping and valves) internal to the wet well will be stainless steel. including float hangers, anchor bolts, cable systems. etc.*
11. *The station will be designed to include an isolation valve located in the discharge line between the station and the pumping bypass port, no less than twelve (12) pipe diameters from the dry well.*
12. *City water will be provided to the station for hose down and pump seal supply. An approved backflow prevention device will be provided on the water supply line outside the dry well to protect the public water system. The backflow device will be tested and certified by a licensed cross-connection control specialist (CCS) prior to acceptance of the system.*
13. *A 100-amp minimum 80/277-volt 3-phase 4-wire main service will be provided as per plans. The service will be sized to accommodate the requirements of the pump station.*

14. *All electrical equipment will be enclosed in a freestanding. vandal proof, au-weather enclosure NEMA 3R or better.*
15. *A minimum 100-amp, 480/240-volt, 3-phase emergency power hookup will be provided as necessary to serve the pump station. The transfer switch will be sized to accommodate the load with a 100-amp minimum.*
16. *Overhead lights will be operated with a manual switch.*
17. *Wiring will be THHN stranded copper.*
18. *Lift station telemetry will be compatible with the system in use by the city at the time of proposed construction. The telemetry will transmit and receive signals through a phone line. The system will. be installed entirely by the contractor. The telemetry will be enclosed in a NEMA 1 enclosure within the electrical cabinet. The Public Works Department will have final approval authority over the telemetry system that will be used.*
19. *Conduit will be galvanized, or of a non-corrosive material as approved by the city, except conduit that penetrates a wet well or corrosive environment will be coated rigid PVC.*
20. *Pump motors will be 3-phase, 480 or 240 volts, and provided with elapsed time meters.*
21. *Pump control system will be Milltronics Hydroranger 200 with xrs-s/xrs-5c transducers. The Public Works Department will have final approval authority over the control system that will be used.*
22. *Lift stations will be designed to accommodate a confined space entry davit, as utilized by the Public Works Department. An appropriate bracket unit will be included with the station at the wet well entry fid to support the city's confined space entry equipment.*
23. *The lift station will include the following alarm and station status points, as applicable:*

| | |
|---|---|
| Wet Well Level | Pump #2 |
| Low Wet Well | Run |
| High Wet Well | Auto |
| Dry Well Flood | Off |
| Seal Pressure | Seal Failure |
| Pump #1 | VFD #2 Failure |
| Run | AC Power Failure |
| Auto | Generator Run |
| Off | Generator Fail |
| Seal Failure | Intrusion |
| VFD #1 Failure | Fire |

24. *Provide for a minimum of 45 seconds pump run time per pump cycle and a maximum of ten (10) pump starts per hour.*
25. *Plans and specifications must be submitted to the Public Works Department and approved in writing prior to ordering a package lift station.*

B. *Wet Well/Dry Well*

1. *The dry well will be vented with an exhaust fan to meet state safety standards.*

2. *Wet well will be equipped with a permanent attached, full- depth, internal, galvanized access ladder. The ladder will be galvanized or of a non-corrosive material as approved by the city.*

3. *Entry lid to the station dry well will be constructed of with rust proof coating or fiberglass.*

4. *Dry wells will be provided with an automatic sump pump plumbed to lift station wet well.*

5. *Dry wells will be provided with dehumidifier equipment appropriately sized to remove moisture from the dry well.*

C. *Submersible*

1. *Lift station will be designed so as not to require entry into the wet well for any but emergency needs.*

2. *Provide pump removal system made with stainless steel pipe guide rails. Cable guide pump removal systems will not be considered.*

3. *Control panel and all other electrical enclosures will be mounted on stainless steel unistrut.*

4. *Water service to the station will be provided through a frost-free hydrant set within ten (10) feet of the wet well hatch. The hydrant will be located so as not to create a hazard to pedestrians or traffic. The Public Works Department will have final approval authority over the hydrant location.*

*5D PRESSURE SEWER (FORCE MAIN)*

*5D.01 General*

*Low pressure systems, i.e., force mains, may be considered for situations where high groundwater table or topography make gravity sewer impractical. STEP systems are addressed separately in Chapter SE.*

*5D.02 Design Standards*

*The design of any sewer extension/connection will conform to City Standards, Department of Ecology's "Criteria of Sewage Works Design" and any applicable standards as set forth herein and in Sections 1.03 and 1.11.*

*The layout of extensions will provide for the future continuation of the existing system as determined by the city. In addition, main extensions will be extended to and across the side of the affected property fronting the main.*

*The system will be designed at full depth of flow on the basis of an average daily per capita flow as shown on the Table in Section 5B.02. A coefficient of friction of 120 will be used for the Hazen-Williams "C" valve.*

*New sewer systems will be designed by methods in conjunction with the basis of per capita flow rates. Methods will include the use of peaking factors for the contributing area, allowances for future commercial and industrial areas, and modification of per capita flow rates based on specific data. Documentation of the alternative method used will be provided along with plans.*

*Applicable General Notes in Section 5B.02 will be included on all plans dealing with pressure sanitary sewer design.*

*5D.03 Force Main*

A. *Material. Force mains up to twelve (12) inches will be ductile iron AWWA C151 Class 50 or PVC C900 with ductile iron fittings and gasket joints. For fourteen (14) to twenty-four (24) inch mains, pipe will be ductile iron C151 Class 50 or PVC C905 with ductile iron fittings and gasket joints. A more rigid pipe may be required where unlimited trench widths occur. All ductile iron pipe and fittings will be epoxy coated or PE lined and designed for use with corrosive materials.*

B. *Depth. Force mains will have a minimum thirty-six (36) inches of cover to top of pipe. See Chapter 4 Section 4. 13 for Sanitary Sewer/Watermain Crossing requirements.*

C. *Velocity. The minimum velocity allowed is two (2) feet per second (fps) at average dry weather flow. Two (2) fps is required to maintain solids in suspension although three (3) fps is desired to scour settled solids. Maximum velocity allowed will be eight (8) fps.*

D. *Locate. Force mains will include toning wire, cathodic protection and tracer tape installed in accordance with requirements herein.*

*5D.04 Air/Vacuum Valves*

*Air release valves and air/vacuum valves will be located at the high points of the one within a manhole or approved vault that provides eighteen (18) inches of clearance on all sides between the assembly of the wall(s). Air release valves will be fitted with an activated carbon canister to prevent the release of disagreeable odors to the surrounding area. Grades will be designed to minimize the need for air/vacuum valves when practical. Vehicular access to the valve is required for maintenance.*

*5D.05 Force Main Drain*

*Provisions to drain a force main to facilitate repairs or to temporarily remove a force main from service will be provided. This may be accomplished through the use of a valved tee connected to a drain line at its low point with isolation valves on both sides of the tee along the main. A manhole will be set over the force main at the valved tee to provide a sump for the wastewater to be drained into.*

*5D.06 Thrust Blocking*

*Location of thrust blocking will be shown on plans. Thrust block concrete will be Class B. 3,000 psi, poured against undisturbed earth. A plastic barrier will be placed between all thrust blocks and fittings.*

*See Standard Details 4-13 and 4-14 in Chapter 4 of these Standards. Restraining joint systems may be allowed in lieu of thrust blocking when designed by a licensed engineer and approved by the Director of Public Works. Restraining joint brand, type and size will be specified on the plans.*

*5D.07 Force Main Termination*

*Hydrogen sulfide (H2S) odors and the buildup of sulfuric acid ($H2SO_4$) occur in the operation of a force main. To mitigate these conditions, some type of control method(s) will be used. This may include chemical addition at the pump station and/or the re-aeration of the wastewater at or near the terminus. The means of re-aeration will be approved by. the Director of Public Works.*

*The outfall manhole (point of connection where force main discharges into gravity sewer) and the next downstream manhole on the gravity sewer will be protected against corrosion. The means of protection will be approved by the Director of Public Works and may include spray-on coatings and PVC linings. ff a PVC lining is used, it will be cast into the wall and floor of the manhole. No exposed concrete will be permitted.*

*5D.08 Pigging Ports*

*A pipeline pig is a projectile that is forced through the inside of a pipe to clean pressure pipeline. A pigging port is used as a point to send or retrieve the pig. Pigging ports will be located outside of paved areas but within the right-of-way as shown in Standard Drawing 5-15.*

*Pigging ports may be required:*

*A. At a change in pipeline size;*

*B. At the end of a dead-end line;*

*C. No farther apart than every 3,000 feet.*

*These locations are subject to review and approval by the Public Works Department.*

*5E STEP SYSTEM*

*5E.01 General*

*A Septic Tank Effluent Pump (STEP) system is a facility consisting of a tank or tanks for settling and digesting wastewater solids, and a pressure piping system for conveying the supernatant liquid into the sewer system. Only sanitary wastewater will be discharged into the tank. Roof drains and other stormwater sources will be strictly excluded. A STEP system may be installed -to serve residential locations where approved by the city. A proposed site plan is required for each STEP system. Any new single- family subdivision designed with STEP sewers will include an easement on the face of the plat for access to all lots.*

*Operation and maintenance of the public portion of the STEP system will be the responsibility of the city only after the system has been inspected and approved and an easement is granted to the city and the warranty period of one year has expired. The public portion of the STEP system is defined as the STEP main and other components that are common or shared by all customers connected to the system as well as those portions of the individual service lines located under city streets and curbs. Operation and maintenance of the tank, pump, pump controls. and service lines located outside of city streets will be the responsibility of the property owner.*

*ALL STEP system customers are required to" pump their tank(s) and have the pump system inspected every four (4) years. unless conditions dictate a more frequent schedule. The inspection is to be conducted by a licensed plumbing contractor qualified to perform such work. The customer will provide the city with proof of having the pumping and inspection work accomplished. The city will maintain the records of the pumping and inspection work for each STEP customer on the city sewer system. If a STEP customer fails to. have the scheduled. pumping and inspection conducted; the city may elect to have the work performed. All costs associated with this work will be billed to the customer through their regular utility bill.*

*Power will be provided and paid for by the STEP customer. The customer will be responsible for taking corrective actions in a timely manner whenever an alarm is activated or maintenance and repairs become necessary. All sewer piping, drains. and plumbing between the street curb or edge*

*of pavement and the building being served will be the responsibility of the customer. The customer will be responsible to curtail water usage during times of STEP system malfunction until such problems are corrected. The city will not accept responsibility for damages resulting from plumbing backups or other problems associated with STEP system facilities or plumbing that the customer is responsible for.*

*Currently, only the Orenco STEP Pump System shown in Standard Drawing 5-7 has been approved by the City of Napavine … However. other suppliers of STEP system components will be considered if equal to the Orenco product. The specifications must be submitted to the Public Works Department for review and approval prior to inclusion with a proposed STEP system.*

*The outfall manhole where the STEP system main discharges into the gravity sewer and the next downstream manhole will be lined to protect them against corrosion. The means of protection will be approved by the Director of Public Works and may include spray-on coatings and PVC linings. If a PVC lining is used, it will be cast into the wall and floor of the manhole. No exposed concrete will be permitted.*

*5E.02 Design Standards*

*The design of any STEP sewer system will conform to City Standards and any applicable standards as set forth in Sections 1.03 and 1.11.*

*The layout of extensions will provide for the future continuation of the existing system as determined by the city. In addition. STEP mains will be extended to and through the side of the affected property fronting the main. Individual service boxes will be located at or near the center of each lot, at least ten (10) feet from city water meter.*

*Pump and pipeline sizing will conform to the criteria as set forth in the most recent version of the Napavine General Sewer Plan. Also, the applicable General Notes in Section 5A.09 will be included on any plans dealing with STEP system design.*

*5E.03 Pipe*

A. *Mainline. The minimum pipe size used is 2-inch inside diameter. This is based on maintenance requirements rather than flow. Pipe will be PVC Class 200, ASTM D2241, SOR 21 with rubber gasket joints. Gaskets will comply with ASTM D 1869. STEP mains will have a minimum thirty-six (36) inches of cover to top of pipe. See Chapter 5A.03 for Sanitary Sewer/Watermain Crossing requirements.*

B. *Service Line. Service connection pipe will be minimum 1-inch diameter, Schedule 80 PVC water pipe, solvent welded connection located at 90 degrees to the mainline, when possible. Solvent cements and -primer for joining PVC pipe and fittings will comply with ASTM D 2564 and will be used as recommended by the pipe and fitting manufacturers.*

   *Services will have a minimum twenty-four (24) inches of cover over the top of the pipe. Pressure services crossing over any waterline will follow DOE requirements.*

C. *Building Sewer. The gravity building sewer between the building and the tank will be designed and installed in accordance with the Uniform Plumbing Code as adopted in the Napavine - Municipal Code.*

D. *All pipe will be installed with continuous tracer tape set twelve (12) to eighteen (18) inches under the proposed finished grade. The marker tape will be marked "SEWER" and will be*

*plastic non-biodegradable, metal core, or backing that can be detected by a standard metal detector. Tape will be Terra Tape "D" or approved equal. In addition to tracer tape, 14-gauge coated copper wire will be wrapped around the pipe, and then brought up and tied off at the valve boxes.*

*A 1-lb magnesium anode will be buried with the sewer fine every 1,000 linear feet for cathodic protection of the wire. Toning wire splices and connections to anodes will join wires both mechanically and electrically and will employ epoxy resin or heat shrink tape insulation. Furnishing and installing the tracer wire and anodes will be incidental to pipe installation.*

*5E.04 Fittings*

*All pipe fittings will have a minimum working pressure rating equal to the pipe to which they are connected. Fittings will be PVC 1120, rubber joint complying with ASTM 0-1784, 0 2466, or D-2467, for pipe larger than 1- inch. Solvent weld fittings for 1-inch pipe will be socket type Schedule 40 and will comply with ASTM D 1784 and ASTM D 2466.*

*5E.05 Valves*

A. *A. Ball and Gate Valves. ALL 1-inch valves will be PVC ball valves with pre-loaded EPDM stem seals, micro-finished PVC ball and self-adjusting polyethylene ball seat to compensate for wear and prevent over-tightening. Valves will be designed for use with corrosive fluids, for low torque manual operation, and for a working pressure of 150 psi. All 1-inch valves will be LT-1000-S as manufactured by KBI (King Brothers Industries) or GFSOO as manufactured by George Fisher Signet. Inc.*

   *All 2-inch and larger valves will be resilient wedge gate M&H style 820 or Waterous Series 500 plug valves with an epoxy coating to resist corrosion. A ball or gate valve will be located at every intersection and at a maximum of every 500 feet. Valves may be installed in conjunction with required pigging ports.*

B. *Air Vacuum Valves. Air release and air/vacuum values will be located at the high points of the line. Profiles for each pipe run will be submitted with the hydraulic grade line for both static and dynamic flow conditions to show where the critical points are for air release valves. Vehicular access to air/vacuum valves is required for maintenance.*

   *Because the air released by these valves will contain hydrogen sulfide, the valves and their enclosures have to be constructed of corrosion resistant materials. The valve vaults will also have insulated lids to prevent freezing. The air released from the valve will be quite odoriferous, thus, each vent will be equipped with an odor control system such as activated carbon filters impregnated with sodium hydroxide.*

C. *Check Valves. Check valves used on service lines will be a tee or wye pattern swing check, PVC. It will have a working pressure of 150 psi. Valves will be designed for use with corrosive fluids. A check valve will be installed at the end of the service stub-out at the property fine to be installed in a valve box located at or near the center of the Jot at least ten (10) feet from any water meter. Check valves will be King Brothers Industries, KSC or approved equal.*

D. *Pressure Sustaining Valve Assembly. Pressure sustaining valves are sometimes required in the design of STEP systems to keep the pipeline full during periods of low or no flow or when siphoning conditions exist.*

   *The pressure-sustaining valve will maintain inlet pressure at a pre- established set point, as determined by the city. It will open as pressure starts to increase above the set point and close*

*as pressure falls below the set point. In the open position, flow will enter the valve in a direction axial to the pipe. turn radially outward through a slotted grid work, and then inward to the former inlet axial direction. The valve will be constructed of two (2) parts: a 316 stainless steel body and an elastomeric liner or control element. The valve will be roll Seal Valve as manufactured by the Roll Seal Valve Company, Inc., or approved equal.*

E. *Pressure Sustaining Valve Vaults will be pre-cast, reinforced concrete vaults with spring assisted hinged galvanized steel doors that open to a minimum of 36" by sou clear opening and will be marked "SEWER." The entire unit will be rated for H-20 traffic load and have extensions as needed.*

F. *The Pressure Tank will consist of a steel tank containing a sealed- in-place heavy-duty diaphragm that separates air from the water. The portion of the tank where water is stored will be coated with an FDA approved fusion bonded polymeric lining material that isolates water from the metal tank and protects the tank from corrosion. The tank will be suitable for direct bury or continuous operation in a damp environment. T-he tank will be similar in all respects to an Aqua-Air, V-458 as manufactured- by A.O. Smith, Consumer Products Division, lnc., or approved equal.*

G. *Valve Box Lids will be marked "SEWER" so they can quickly be distinguished from valves in the water system.*

H. *All Service Connect Boxes will be Carson Model 1419 with hinged bolt down covers and 1419E extension box as required or approved equal.*

*5E.06 Pigging Ports*

*Pigging ports may be required as noted in Section 5D.08.*

*5E.07 Step System Septic Tank*

*Tanks for single-family residential use will be rectangular pre-cast concrete, single chamber, and designed by a registered structural engineer. Fiberglass or polyethylene tanks will not be allowed. Dual chamber tanks may be required in certain instances as determined by the Director of Public Works.*

*Tank liquid volumes will be sized as follows:*

A. *Up to 4-bedroom house, 1,000 gallons*

B. *5 to 6-bedroom home/duplex, 1,500 gallons*

*Tank sizes for applications other than those noted will be approved by the city.*

*All tanks will be manufactured to accept pump assemblies or effluent filters and have a pre-cast groove 1-inch wide by ½-inch deep, 30 inches in diameter, to allow positive attachment of the riser. The manufacturer will provide the structural design and certification for the city to review.*

*The design or analysis will be in accordance with accepted engineering practice. Tanks less than four (4) feet in depth will be designed for the following loading conditions:*

A. *Top of tank 400 lbs. per square foot (psf).*

B. *Lateral load of 62.4 psf.*

C. *The tank will be designed to support a 2,500-lb wheel load.*

*D. The tank will be designed to withstand hydrostatic loading equal to the maximum depth of bury, in addition to the soil loading. Maximum depth of bury will be measured from the ground elevation to the invert of the sewer line entering the tank.*

*Deeper installations, if required by local conditions, will require special consideration, as will tanks located where a vehicle might be driven over them. Traffic bearing tanks will be designed to withstand an H-20 live load with a minimum soil cover of eighteen (18) inches.*

*All tanks will be guaranteed in writing, by the tank manufacturer for a period of two (2) years from date of delivery to the project. Manufacturer's signed guarantee will accompany delivery.*

*Systems installed on a site where an existing septic tank exists may not use the existing tank. The existing tank must be removed or abandoned per Department of Health and/or Lewis County requirements.*

*Concrete material and construction will meet the requirements of Section 6-02 of the most recent edition of WSDOT/APWA Standard Specifications for Road, Bridge, and Municipal Construction.*

*Walls, bottom and top of reinforced-concrete tanks will be designed across the shortest dimension using -one-way slab analysis. Stresses in each face of monolithically constructed tanks may be determined by analyzing the tank cross-section as a continuous fixed frame. The walls and bottom slab will be poured monolithically. Concrete will achieve a minimum twenty-eight (28) day compressive strength of 5,000 psi. The concrete mix will not be modified unless the mix design is reviewed and approved by the city.*

*Reinforcing steel will be ASTM A-615, Grade 60, fy = 60,000 psi. Details and placement will be in accordance with ACI 315 and ACI 318.*

*Tanks will be protected, by applying a heavy cement-base waterproof coating, Thoroseal or equal, on both the inside and outside surfaces.*

*Tanks will be manufactured and furnished with 18-inch diameter access openings of the size and configuration shown on the Standard Drawings. Modification of completed or existing tanks will not be permitted for structural, warranty, and liability reasons. Tanks will be furnished without concrete access-hole lids. In order to demonstrate water tightness, tanks will be tested prior to acceptance. Each tank will be tested at the factory by filling with water to the base of the riser and letting it stand. After 24 hours the tank will be refilled to the soffit and the exfiltration rate will be determined by measuring the water loss during the next two (2) hours. The two (2) hour water loss will not exceed one (1) gallon.*

*The tank will not be moved from the manufacturing site to the job site until it has cured for seven (7) days and has reached two-thirds of the design strength.*

*Tanks will be bedded on six (6) inches of sand or pea gravel. Sides will be compacted in two (2) foot lifts to the same or greater density than the surrounding area.*

*After the tanks have been set in place and the riser installed, but prior to backfilling, each tank will be tested by filling the tank to two (2) inches above the base of the riser for a 2-hour period. Water loss will not exceed one (1) gallon.*

*Tanks installed where groundwater levels are above tank bottom require precautions to prevent flotation. In general, tanks will immediately be filled with water and will not be pumped down more than three (3) feet below top.*

*Tank excavation will be backfilled with select material free of boulders and compacted to a dry density equal to or greater than that of the adjacent, undisturbed soil. Finish grading: cleanup, and restoration will be completed prior to final acceptance by the city.*

*5E.08 Tank Riser*

*Outlet risers will be ?30-inch diameter fiberglass or ribbed PVC as manufactured by Orenco Systems, Inc., or approved equal. Outlet riser will be a minimum of eighteen (18) inches high or as otherwise shown on the engineering drawings. Outlet risers will be factory equipped with the following:*

A. *A. Two, 1 or 1¼-inch diameter (IPS) neoprene grommets, one for the pump discharge, installed 8 to 10-inches from the top of the riser, and one for the splice box conduit.*
B. *B. A PVC splice box: with 4 cord grips and one 1-inch outlet fitting, Orenco Model No. S841 or approved equal.*

*A lid will be furnished with each riser. It will be a latching type and will be constructed of fiberglass with an aggregate finish. Riser and lid combination will be able to support a 2,500 lb. wheel load. This does not imply that PVC risers are intended for traffic areas. All valves and unions will be no more than twelve (12) inches deep in riser.*

*Each riser will be bonded to the top of the concrete tank with a two-part epoxy that will be supplied with the riser by the manufacturer. The epoxy will be applied in accordance with the manufacturer's recommendations.*

*A generous bead of epoxy will be laid completely around the bottom of the tank. After the riser is in place, a generous fillet will be run completely around the inside base. The epoxy will be allowed a minimum of four (4) hours curing time at 64 degrees Fahrenheit: otherwise a greater time will be required based on the manufacturer's recommendations, before backfill is placed over tank. Epoxy will be placed in an adequate amount to properly bond with the riser components. Care will be exercised during the curing period to avoid dislodging the riser or disrupting the watertight seal between the riser and tank.*

*5E.09 Pumping Equipment*

*Pumps will be stainless steel, thermoplastic, or coated inside and out with baked-on epoxy paint, UL listed for use in effluent. All pumping systems will be Orenco Systems Model OSI S 4000 Series high head pumping assemblies or approved equal comprised of:*

A. *Standard Vault: 15"x 48" PVC Vault and Flow Inducer, Orenco Model No. SV 1548FI with eight (8) 1-3/8-inch diameter inlet holes or approved equal.*
B. *Hose and Valve Assembly includes one 1-inch diameter flexible PVC nose with quick-disconnect fittings and PVC ball valve, Orenco Model No. HV 100 Bfc or approved equal.*
C. *Mercury Switch Float Assembly, Model MF-ABR or approved equal, with three (3) mercury floats mounted on a PVC stem which attaches to vault and will be wired to the control panel in accordance with manufacturer's color coding, using #14 AWG THHN Standard as minimum.*

*D. Pump: OSI High Head, 1/3 hp or 1/2 hp, 115V, single phase Model 8 OSI 03 HH or 8 OSI 05 HH, with eight (8) foot cord and 1/8-inch bypass orifice for effluent application, or approved equal.*

*All pumping systems will be installed in accordance with the manufacturer's recommendations. Pumps will be accessible for operation and maintenance from ground level.*

*5E.10 Controls and Alarms*

*All STEP systems will be wired to a dedicated 20-amp breaker that supplies power to the STEP system control box only. This is required to avoid damage or overload to system and appliances. The customer is responsible for the operation and maintenance of the breaker feeder wires that serve the STEP system. All buried power will be installed with continuous tracer tape set twelve (12) inches above the buried power. The marker tape will be plastic non-biodegradable, metal core backing marked "Power".*

***Float switch positions** on the PVC 3 float assembly are to be set at the following levels:*

*A. "High level alarm" at nine (9) inches below underside of tank top*

*B. "On" at 3-1/2 inches below "high level alarm" and "off." in same float as "on" set 3-1/2 inches below "on"*

*C. "Redundant with "low level alarm" set four (4) inches below "off'.*

*Control panels will be Orenco Systems Mode) S-IRODS (redundant off with disconnect assembly) or approved equal with the following features:*

*A. Rating: 1 HP/115 VAC, 2-HP/230 VAC, single phase, 60 Hz Motor start contact will be rated for 25 FLA, single phase, 60 Hz.*

*B. Audible alarm, panel mount with a minimum of 80 db sound pressure at twenty-four (24) inches continuous sound. Alarm will be located within sight from the tank. when practical.*

*C. Oil-tight visual alarm. red lens: with push-to-silence feature.*

*D. Automatic audio-alarm reset.*

*E. A 15-amp motor rated toggle switch, single-pole, double-throw with three (3) positions: manual (MAN), center (OFF) and automatic (AUTO).*

*F. NEMA 4X-rated fiberglass enclosure with gasket, hinged cover, and locking latch.*

*G. Alarm circuit will be wired separately from the pump so that if the internal pump overload switch is tripped, the alarm will still function.*

*H. A 20-amp power disconnect assembly toggle switch to de-energize entire control panel, to permit servicing panel without access to the customer's breaker switches. The pump control panel will be mounted on the side of the house nearest the tank and pump, preferably on a portion of the structure not intended for occupancy. The control panel will be located within sight of the tank in all cases and of the street where practical. The panel will be between four (4) and five (5) feet above finished grade.*

*I. There will be a dedicated 20-amp circuit breaker serving the pump control panel.*

*J. Control panel will contain hour meter and event counter bases so the meter and counter may be moved from one installation to another.*

*5F GREASE TRAP/GREASE INTERCEPTOR*

*5F.01 General*

*Acceptable grease traps or grease interceptors will be required for all restaurants, commercial kitchens, industrial processing facilities or other facilities where fats, oils or grease (FOG) could be otherwise discharged to the sanitary sewer system. Such equipment will be operated and/or maintained by the owner or operator of such facilities so as to eliminate the discharge of these substances to the sanitary sewer system. Grease traps and interceptors will be designed in accordance with the most recent edition of the Uniform plumbing Code (UPC) as well as these Standards.*

*Grease traps and grease interceptors are placed on "gray" water drain lines from fixtures that discharge high concentration levels of FOG. They are generally installed on premises that have kitchens and/or food preparation facilities for large numbers of people. These facilities include restaurants/food services, hotels/motels, schools, and institutions.*

*The purpose of a grease trap or a grease interceptor is to provide a place for the wastewater to reach a semi-quiescent state and cool sufficiently; allowing the liquefied FOG to solidify and be retained through separation before the wastewater reaches the sanitary sewer system. The retained FOG is regularly cleaned and/or pumped out. The maintenance frequency varies with each facility and will be established by a representative from the Wastewater Division.*

***A. Grease trap***

*A grease trap is a device designed to retain FOG from a source of up to four (4) fixtures. Grease traps are usually located near the fixtures being served, inside the facility. The connection of dishwashers to grease traps will be avoided when practical. The maximum liquid temperature through a grease trap will be 90 degrees Fahrenheit. A dump valve may be required to ensure the liquid temperature standard is maintained, at the discretion of the Director of Public Works.*

*All grease traps will be regularly maintained by the customer at a frequency as determined by the facility characteristics. A maintenance log will be kept on-site for recording of alt maintenance activity. At a minimum, the log will contain date of maintenance and/or inspection, work performed, and name of individual who performed service.*

***B. Grease interceptor***

*A grease interceptor consists of a tank with a minimum liquid volume of 750 gallons and serves multiple fixtures of a facility. Grease interceptors are generally located outside the facility they serve and are buried underground.*

*Interceptors will be water tight and constructed of materials not subject to excessive corrosion. Appropriate tank materials include concrete, coated metal, and fiberglass.*

*Plans for grease interceptors will include dimensions, structural reinforcing, structural calculations, and other pertinent data as determined by the Director of- Public Works. Interceptors will be designed by a professional engineer licensed in the State of Washington.*

*5F.02 Location*

*Grease traps and interceptors will be located in such a manner as to be easily accessible for cleaning, pumping, and sampling. In addition, they will be as close as practical to the fixtures*

*discharging into them. In general, an appropriate location is under a kitchen sink (for traps) or immediately outside the facility served (for interceptors).*

*5F.03 Design*

*The following considerations will be factored into the design of a grease trap or interceptor:*

*A. Capacity of the trap or interceptor*

*B. Appropriate baffling at both the inlet and outlet*

*C. Accessibility for cleaning and maintenance*

*D.*

*E. Isolation from insects, rodents, and pests*

*F. Sufficient liquid travel time between inlet and outlet to ensure separation of the FOG prior to discharge from the unit*

*G. Flow control fittings will be installed on the inlet side of smaller traps to protect against overloading and surges from the fixtures*

*H. Venting of outdoor interceptors is not required where siphoning, of the contents is prevented by providing appropriately sized outlets*

*5F.04 Capacity*

*A. Grease Interceptor*

*The size of a grease interceptor wilt be determined by using the following formula:*

***MPH x WR x RT x SF = Vol***

***MPH** = number of meals served per peak hour, or seating capacity (whichever is applicable)*

***WR** = cumulative waste flow rate, based on the fixtures*

*-with dishwasher = 6 gallons*

*-without dishwasher= 5 gallons*

*-single service kitchen (i.e. no reusable dishes or flatware) = 2 gallons*

*-garbage disposal = 1 gallon*

***RT** = retention times*

*-commercial kitchen= 2.5 hours*

*-single service kitchen = 1.5 hours*

***SF** = storage factor*

*-8 hour operation = 1*

*-single service kitchen = 1.5*

*-16 hour operation = 2*

*-24 hour operation= 3*

***Vol** = minimum interceptor liquid volume in gallons*

*B. Grease Trap*

*The capacity of a grease trap will be determined by using the following table:*

| Number of Fixtures | Required Flow Rate (gpm) | Grease Retention (lbs) |
|---|---|---|
| 1 | 20 | 40 |
| 2 | 25 | 50 |
| 3 | 35 | 70 |
| 4 | 50 | 100 |

**FINDING:** This standard applies. This submitted site plan and application materials show sewer connection and sewer main lines for the site. A sewer Pump Station will be needed for Phase 2.

**CONDITION OF APPROVAL: Prior to engineering approval, sewer utility plan sheets and details meeting applicable standards of Chapter 5 shall be submitted for review and approval by the City.**

**CONDITIONS OF APPROVAL: Lift station failure must over flow to closest manhole and not back up into residences.**

**CONDITION OF APPROVAL: Prior to construction, all sewer system materials and methods shall be reviewed by the City for compliance with applicable standards.**

## V. COMMENTS

Forty-nine comments were received during the public comment period. These comments and conditions are included in the findings and conditions stated within this staff report.

## VI. CONDITIONS OF APPROVAL

Proposed Conditions of Approval have been provided within this staff report for City Consideration. If the City approves the Applicant's Development proposal, additional conditions may be placed based upon public comments and results of Planning Commission and City Council.

## VII. DECISION

Based upon the proposed Site Plan, submitted Application materials, the findings and conclusions stated above and within the attached exhibits, the City of Napavine Public Works/Community Development Director hereby provides two alternative decisions that Planning Commission and City Council may consider:

A) DENIAL of the development proposal with specific findings; or
B) APPROVAL WITH CONDITIONS including Mitigation Measures with findings of fact.

**EXHIBITS**

| No. | Document | Date Received |
|---|---|---|
| 1 | Boundary Line Adjustment (BLA) Application | May 24, 2024 |
| 2 | Subdivision Land Use Code Memo | June 20, 2024 |
| 3 | Traffic Impact Analysis (TIA) | June 20, 2024 |
| 4 | Site Distance Memo | June 20, 2024 |
| 5 | Geotechnical Report | June 20, 2024 |
| 6 | Critical Areas Report (CAR) | June 20, 2024 |
| 7 | Phase 2 Environmental Site Assessment | June20, 2024 |
| 8 | Phase 1 Preliminary Plat Drainage Report | June 20, 2024 |
| 9 | Sewer Extension & Basin Map | June 20, 2024 |
| 10 | Soil Reinforcement in Landslide Hazard Area Memo | July 16, 2024 |
| 11 | Critical Areas Variance – Steep Slope Memo/Application | July 18, 2024 |
| 12 | Fire Hydrant Flow Test | July 18, 2024 |
| 13 | Wetland Conceptual Buffer Plan – Phase 1 | July 23, 2024 |
| 14 | Steep Slope Modeling Memo – Setback Reduction | July 29, 2024 |
| 15 | Preliminary Plat Application (Signed) | August 8, 2024 |
| 16 | SEPA Checklist (Signed) | August 8, 2024 |
| 17 | Preliminary Plat Phase 1 Plans (3rd Revision) | August 8, 2024 |
| 18 | Landscape Plans | August 8, 2024 |
| 19 | Plat Lighting Study | August 8, 2024 |
| 20 | SEPA Comment Folder – 49 Comments Received (Comment Period Aug 22 – Sept 16) | September 16, 2024 |
| 21 | Cultural Resource Assessment – Phase 1 | November 19, 2024 |
| 22 | Conceptual Wetland Mitigation Plan – Phases 1 & 2 | November 25, 2024 |
| 23 | Applicant's SEPA Response Memo | November 25, 2024 |
| 24 | Revised Site Plan Sheet Identifying Wetlands Phase 1 & Phase 2 | December 27, 2024 |
| 25 | Napavine School District Superintendent Shane Schutz Declaration & Exhibits | February 28, 2025 |
| 26 | Napavine School District Mitigation Fee Study | March 4, 2025 |
| 27 | Revised Boundary Line Adjustment Map | March 11, 2025 |
| 28 | Applicant Response to School Mitigation Fee Report | April 7, 2025 |
| 29 | Napavine School District Mitigation Fee Study Addendum | April 21, 2025 |

# NAPAVINE PLANNING COMMISSION MINUTES
## June 2, 2025 6:00 P.M.
## Napavine City Hall, 407 Birch Ave SW, Napavine, WA

**CALL TO ORDER:**

**Commissioner Graham** opened the Public Hearing meeting at 6:00 PM

**ROLL CALL:**

Planning Commission present: **All Present**

**Commissioner Graham read the meeting procedures.**

**Paul Dennis with Jackson Civil provided a presentation of the project and timeline.** (begins at 1:20 mark)
As mentioned today, we have a subdivision application that's before the city and a boundary line adjustment. So we have two concurrent applications that are going on. First, the boundary line adjustment really is reconfiguring the three parcels, making the first parcel to the West, reconfiguring that so that becomes phase one of the project and the other two parcels really start to make up phase two of a of a future planned phase. It's 195 lot subdivision. What you're considering right now is phase one, which is just 56 lots. The applicant has submitted a number of studies throughout the planning process. The pre-application was held back in December of 2023. In May of 2024, they submitted their boundary Line adjustment application. And a number of documents, including a preliminary plat application in June 20th, 2024. From that a number of other studies were submitted for supplemental documents. We ended up calling the application technically complete as of August 20, 2024. And then did a Notice of Application and SEPA determination in August 2020, August 22nd, 2024. the SEPA determination was a mitigation of determination of non significance and what that means is it wasn't insignificant. The project is going to have an impact on the community. But what that's saying is the impacts that are projected from this development can be mitigated. They have the ability to mitigate, and you'll hear a lot about the impacts here during the public testimony from the school district and from the applicant. We ended that comment period September 16th, 2024. We ended up placing a hold on the project based on the agency comments. We received about 49 comments in total from the public that included eight agencies and 41 citizens at large on this project.

DAHP (Department of Archaeology and Historic Preservation) asked for a cultural resource studies to be done on site. DAHP gave the applicant the ability to do both phases one and two or just split the phases up. The applicant elected to do an archaeological study for phase one.

WDFW (Washington Department of Fish and Wildlife) and Department of Ecology (and possibly core engineers) were on site to verify the location of the wetlands and location of the stream and the buffers to see if they were appropriate and so forth. Department of Ecology asked the applicant to resubmit a site plan and identify wetland D, it was identified in the CAR (critical areas report), but not on the site plan. That is a phase two impact.

From there we accepted documentation from the school district. They had an independent third party, individual or firm that assessed what the potential impacts from this development is on the school district. But the school district conducted their own facility analysis and determined that they had a number of in-house students and that a project of this size would create additional in-house students as part of that. They looked at different capital improvements to accommodate those students and came up with their own mitigation fee. The mitigation fee was just north of $13,000 per housing unit. There's a couple of ways to mitigate the impact of the school district. You can do a senior housing project, they can still be the same product, it's just age restricted and it has a covenant. Or they can enter into a voluntary agreement with the school district and negotiate what the mitigation fee should be.

You essentially have two alternatives for this project, you can either deny the project and if you do so, you'll have to have some findings of fact of why it didn't meet merits of your own code. Or you have the ability to approve the project but with conditions. Once again, our SEPA determination was mitigated determination non significance, which means there's not a third option where you just approve the project without conditions. It's just there's enough just on the environmental side alone going on that you're going to have to have some conditions of approval and some mitigation that occurs.

Received 13 written comments (part of the record) regarding opposition of the project that had to do with utilities, transportation and schools.

**Commissioner Haberstroh** (begins at 14:38 mark)
One thing I didn't find clear was Woodard, Rd. I don't know if any as far as any improvements on Woodward Rd.

**Paul Dennis with Jackson Civil**
It was part of this staff report. They will have to do street improvements, but those street improvements will be commensurate with each phase. Also on the sewer side, they do have a planned sewer pump station upgrade that's part of their phase two development, but phase one there isn't much. Phase one is one intersection, one entrance coming through with limited street frontage. If they decide to do phase two, they will have to do other street improvements and there are some wetland impacts that will be commenced.

As part of our land use process, when you own more than one parcel and you have a large project, almost every jurisdiction in Washington state asks that they show future phases so that you can get a sense of how big the projects going to be, and what's the scope of that project.

**Parker Howell – Napavine School District Attorney** (begins at 17:00 mark)
We're here today to ask that the Commission make an important decision, which is to uphold the recommendation that was included in the staff report regarding conditions that should be placed upon this development, if it is approved, that would require the developer to either make the roughly 195 units senior housing, or in the alternative have the developer enter into a voluntary agreement which is permitted under state statute with the school district to effectively have a per unit monetary fee to fund at least some small portion of the costs that are going to be imposed upon the school district by this development. Now the facts are well established in the record, as alluded to by staff. The district did bring in a third-party consultant to describe what the temporary costs would be in terms of continuing to house students in portables. Many are already housed in portables as talked about in that report, but also to describe what the actual costs of funding permanent housing in terms of long-term capital facilities needs would be for the district even to hold in temporary facilities. We're talking several $1000 per unit would be necessary and it goes far beyond that. If we were going to actually discuss the permanent costs of potentially 10s of thousands of dollars as described in that report, now the district is not asking for that full amount.

As you're all probably aware, the city as well as the county do not have impact fees currently on the books for schools, which is an option that the district would like to impose and look into going forward with the cooperation of the city. However, state law is clear both in the SEPA statue and the subdivision statute that the city must make adequate provision for schools, and it's essentially undisputed, where I would argue it's not disputable, reasonably, that the district's existing facilities are at or near capacity in a variety of respects. And it's also not disputable that there is going to be an impact on the districts facilities by an influx in students coming from these roughly 200. There's two legal points I'm expecting that the developers attorney is likely going to talk about tonight the 1st, and I think both of those are legally incorrect.. The first is an allegation that the city's code is somehow deficient and doesn't allow you to impose reasonable measures to deal with school facilities and the impacts. That's incorrect, and I'd be happy to provide briefing to the Commission or to the city on that point, but take, for example, Napavine municipal code section 18.04.070, subsection B subsection four. That's just one example of a place where the Napavine municipal code incorporates by reference the underlying cipher statutes that define what the impacts on a school district could be, and I submit to you that that would allow you to rely on those and other portions. Additionally, there are arguments about proportionality and whether, as a constitutional matter, this would be an undue burden on this particular developer, when perhaps other developers haven't been required to pay mitigation fees. Again, I would submit to you that the district is only asking for a small portion of the actual and established costs that are either equal to or less than the proportional impact of these particular units that would be developed here. Finally, I should mention that there's an unpublished court decision in the division. Two of the Washington Court of Appeals that allows exactly and precisely the type of contingency that the staff has recommended and that the district asks you to uphold here, and that is this idea of having the developer either enter into a voluntary mitigation agreement or on in the alternative designate to senior housing.

Finally, I should mention that there's an unpublished court decision in the division two of the Washington Court of Appeals that allows exactly and precisely the type of contingency that the staff has recommended and that the district asks you to uphold here, and that is this idea of having the developer either enter into a voluntary mitigation agreement or on in the alternative.

**Parker Howell – Napavine School District Attorney** (begins at 22:10 mark)
Now finally I should mention that we have had negotiations with John Mastandrea, the developer on behalf of Enzo Holdings and with Miss De Leon, the attorney now appearing on behalf of the developer. We look forward to continuing those discussions. There's been some back and forth about what those numbers are, notably the developer reduced the amount it was willing to pay per unit after negotiations got started and we have yet to respond to that. But we believe on behalf of the district that it is reasonable for the developer to bear its fair share of the costs to make sure our students have an effective, safe and useful place in order for them to learn. So thank you. I appreciate your time.

**Commissioner Morris** – (begins at 22:53 mark)
Has the developer not offered the school anything?

**Parker Howell – Napavine School District Attorney** (begins at 23:00 mark)
Initially the developer proposed basically building a middle school building on behalf of the district. And so we proposed a formal agreement in draft that would have allowed that to occur in the district. Appreciated the developer reaching out and making that type of a proposal. Unfortunately, there's a number of legal complexities to building a school where you try to have a private developer do it on behalf of the district. And it makes it much more expensive complicated project then if you just wanted to go build the building on behalf of a private party. So as a result of that, the developer kind of made a counter proposal which was a $4500 per unit fee. The district then countered with $6000 per unit fee. And most recently, the developer countered at 4000. So we're we believe that 4000 is far short of what would be necessary to even have additional students be in portables given every portable cost about 500,000 or more could go north of that with tariffs and everything else we're facing right now.

**Commissioner Morris** – (begins at 24:05 mark)
So the school didn't want a middle school and there not happy with $4000?

**Commissioner Haberstroh** –
I think just the cost was going to be prohibited by the time you do prevailing wage and everything for the developer.

**Parker Howell – Napavine School District Attorney**
So the district again offered a formal agreement. It was many pages long that would have allowed that sort of process to happen, their developer rejected that offer and countered with $4500 per unit. The district then countered with $6000, which again is less than the known temporary or anticipated temporary costs and now in what we would in labor negotiations, call an regressive offer, the developer has gone to $4000.

**Commissioner Haberstroh** –
That payment would be required as the building permit was being pulled, or as a lump sum for the package?

**Parker Howell – Napavine School District Attorney**
The proposal that the district would have for any future negotiations would be at the time of building permit being pulled.

**Paula Sandirk – 621 Forest Napavine Road W** (begins at 26:11 mark) (Provided a letter, is part of the record)
This development of 195 homes is in the wrong place for this community. The city has just spent time and money on the new 25 year comprehensive plan. One of the land use instructions in that comprehensive plan is that to maintain the quality of life for the existing residents. Woodard road currently has about 40 families living on a farm to market road with no shoulders and minimum size of any lots there is about 3/10 of an acre with most of the residences on over an acre. 7500 square foot lots do not fit with the demographics of the rest of Woodard. In that whole thing (site plan) there is no plan for any recreation area in the development. That is next to the school grounds is totally inadequate and that the development will only add about 110 students to the district. I question that, 195 homes when that's something the state average I think is like 1.6 kids per maybe 110 kids for the first 56. The district doesn't have room for that number of added students and the development developers are really pretty reluctant to step up to the plate and do what they need to do. The development will use up about 1/3 of the sewer capacity that the city has right now. I think the sewer capacity is for like 1500 homes and there are 900 homes on it. So that leaves 600. That means 1/3 of the city's sewer capacity is gone in one fell swoop. The water situation is not that good. We did have 4 wells. Two of those wells have been shut down due to PFAS and there's not been a good way to solve that PFAS problem or to get more water. You know, most people don't water their lawns in the summer because they don't want to pay the water bills. But we do like to water our flowers and we like to water our garden. If we only have two wells and another 195 homes, then are we going to be on summer water restrictions because we don't have the capacity.

**Paula Sandirk – 621 Forest Napavine Road W** (continued)
The traffic flow study is questionable. They say that only 110 cars will leave there in the peak morning hours and they will use exit 71 to get to the freeway. I mean, it's a farm to market Road. It's about 12 foot lanes. There are no shoulders. Yes, the developers are going to build a sidewalk in front of along their front edge. But that leaves all the rest of Woodward Rd. to fend for itself. You know the financing for this proposed development is coming from Naperville, IL where 150,000 people live on 25,395 acres. The profit from this will not stay in Lewis County, but the headaches of increased demand on roadways and utilities impact all of us, it is our job to protect ourselves from the impractical encroachment of people who do not care and are only interested in the profit that they can take.

**Mark Morlan – 247-44 Woodard Road** (begins at 30:32 mark)
I own the 20 acres of land immediately east of the proposed division. My wife and I sent letters objecting to this proposal and I want to make sure that it's acknowledged that these letters are in, they contain 39 signatures that we contacted this morning in person. (confirmed received by Commissioner Graham) They are all against this subdivision and very similar to the last speaker. It's about quality of life. These units are inconsistent with the rest of the area. The area has one acre lots to five acre lots and these are 7500 square feet or something. It's we don't want them there and we don't agree with the lifestyle that it brings with it. Not to mention the financial burden that it brings. I am pretty sure that my property that is zoned for one house on five acres is not going to be worth much after this division is next to it. Because who's going to want to build a house next to this kind of subdivision? I think it's obvious the overburden that it's going to bring on traffic on sewer and water, on education and it's an overcrowding of the lifestyle. I don't think the public wants it, and I really think the public should have something to say about it.

**John Serl – 282-28 Woodard Road** (begins at 33:13 mark)
I've been a resident at 282-28 Woodward Rd. for the last 27 years. I've submitted comments for the first session recently revised, extended my comments today. I'll let the other my other set of fellow citizens talk about the quality of life issues this development could create, but my profession is a fish biologist. I've got a end of a 30 year career and I have a Master of Science degree for the University of Washington, so I want to talk about my fish concerns for Allen Creek. I believe that the SEPA document was inaccurate when it said the South fork of Allen Creek is a non-fish bearing stream. I personally observed coho salmon spawning in Allen Creek in November of 2024. As we know, lots of chemical runoff and sediment can come from paved areas. Especially this development will have a lot of paved areas. Particular chemical of concern was found in 2020 by the University of Washington is called 6 PPD quinone. It's a chemical from the breakdown of tire dust. So I would hope that any mitigation measures for the wastewater being treated, the runoff being treated from these roadways in this development would account for that chemical and be properly treated. And that your SEPA document would be revised to say this is a fish bearing stream and all appropriate mitigation buffer measures would be taken.

**Kerry Serl – 282-28 Woodard Road** (begins at 34:51 mark)
I'm sorry that this development will change the character of the neighborhood. I'm concerned about the environment, the groundwater, traffic and the schools. I also wanted to say thank you, Planning Commission. I know you're up like a volunteer group and I appreciate that you've taken your time to help us with this. I'm concerned, I understand that the first iteration that the slope of the top of the hills would be changed because right now as you're going down the road and you're cresting that hill down to the dip it's blind, you cannot see over the edge and if anyone is going too fast like they do every single day. You can't see if there's an deer or a dog,a kid, they're not going to see that. And I understand that that was going to be changed in this iteration. I would like to see it happen again that we change that slope, so that it's not a blind spot. I understand that the plan instead was to change the speed limit and I don't think changing it by 5 miles an hour is going to make a difference. So right now I think people take it at 50 miles an hour quite frequently. And if they don't change the slope, if maybe it maybe signage that says the blind spot was upcoming might be helpful. I'm hoping there's all caution taken to prevent particulates and sediment from entering Allen Creek for the sake of the coho and the Newaukum- Chehalis rivers. And it sounds like you were not going to give us steep slope variance, I hope that continues. That riparian zone is just a great wildlife area. I am a bird watcher and there's just a lot of birds and animals in that area. I am really concerned about the effective traffic right now. I can walk a mile down the street and a mile back and not pass any cars sometimes. So 200 houses worth of people is going to make a big difference. There is no alternative route out of there. There are 40 or so of us past the developments that have no other way out. Also during construction, are we going to have like half hour, one hour wait times to leave the neighborhood like they did when they were paving the road? Is there any way we can mitigate that? And then Mr. Morris was very helpful to me last week and he said there was waste from the former chicken ranch that may impact the groundwater. So since there is currently a well I've seen on that property is that well like 40-50 years old? Could there be a broken seal on that? Should we be worried

that we should have our groundwater tested for nitrates from those of us who live around that area? I don't know if you guys know, maybe we need to talk to the health department. And whatever the schools want, I'm all for that.

**Jeremy Johnson – Refused Address- Woodard Road** (begins at 38:19 mark)
I'm a lifelong resident of Woodard Road, I am hesitant to give my address since I've had members of this Planning Commission snooping down by my property on a gravel dead end road this week. So I'll leave that at that so. Anyway, so we'll leave that for another time because I understand the purpose and its meaning is to address our opposition to this project. Well, I've been up here for two years, two years I've been talking about my opposition to this project. I've mentioned everything from the traffic to the crime that it will bring to the salmon bearing stream. I've mentioned to the mayor when he first got elected, I think in his first term I remember sending him a Facebook message and he's acknowledged this about there being salmon spawning in that creek. I've watched my entire life for 30 years, I've watched the salmon come up and spawn in that river, in that Creek, and this come and spawn right up by the road. We saw thirty of them in November 24th and then in springtime I went down there and I saw a little tiny baby salmon. Video evidence, yes, I do. And so to say that it was rezoned and, oh, it was not a fish bearing stream, that is ridiculous and it's just another example of the dishonesty that has gone into this project, I feel like from this Planning Commission and from the City Council and the mayor and everybody involved in this. In no way is this project not going to affect those spawning salmon, and every time I've addressed or brought this up, planning commissions, Council, they've all danced around the issue. It's the same with the schools, everyone said it until blue in the face. I mean I've been beating this horse to death. You know the poor the middle school is the same portable buildings I was in 20 years ago. They're ramshackle, they're falling apart. And we added housing developments after housing developments already, duplexes and triplexes and everything else, it all affects the school. It all affects my kids. I have 3 kids going to that school. Got one kid going to that school and two kids getting ready to go into it and they're crowded in there enough. We got some out of town developers here that they don't give a damn about the community. They don't give a damn about our small town way of life. They don't give a damn that we've been down there for years and years. We bought those places for a reason. We're down there for the peace and quiet. And I know Bryan said before. Oh, well, if you want to have a place like that, you got to go out to Curtis. No, that's not the case. That's not the case. My dad's built everything on our property with his own two hands as our homestead down there. I've been laughed at and mocked when I said that before. But it's a fact and you know I've been coming up here for two years, I've got nothing but disrespect, passive aggressiveness. And I've been given complete run around and everybody just wants to point fingers. It's totally ridiculous. So I've put in letter after letter. I've been coming up here for two years. I'm going to say it again. For the record, we are opposed to this development. It is a safety concern. The road is not wide enough. 2 trucks cannot pass along that road. If you have a trailer behind you or if there's a garbage can on the side of the road, you are hard pressed not to clip them mirrors of the truck going next to you. Theres no amount of sidewalks or road widening that is going to fix that. Not to mention trying to get out of there at 8:00 in the morning when everyone's trying to go to school. Everyone's trying to go to work and you're sitting there with a one lane road in and out trying to get all these people to come in and out. They're going to be backed all the way up to my place, at the end of the road. It's not the right place for it. We've said it time and time again. The public doesn't want it, but this Planning Commission, the City Council and everybody that I've had interactions with around here do not seem to give a damn, and that's been my take away and I'm extremely frustrated. I'm extremely aggravated. This is my home. This is where I'm trying to raise my children and I get laughed at, mocked, ridiculed, spied on.

**Commissioner Haberstroh –** (begins at 42:58 mark)
Could I interject one minute with due respect? I'm appalled that you're saying everybody up here. OK. I've went out of my way to be nice to you. OK. I'm not perfect, but I think the people up here are donating their time. If someone you have a beef with do not generalize to everybody. If you got photos, I would recommend they get there. I'm not saying there is, or there isn't. But if there's proof we need the proof of the fish and stuff. I think that's important. *(Executive Assistant Katie Williams stated that John Serl has pictures of the fish included with his letter)* Need to get together whether we're local, or not local, we need to all get behind and support bonds for this school.

**Jeremy Johnson – Refused Address- Woodard Road**
And I will say for the record Arnold that I have had good interactions with you, and I have never had interactions with you. For the record.

**Dan Mikota – 194-20 Woodard Road** (begins at 44:39 mark)

Found out about the meeting because the neighbors that are within 300 feet of the property. My folks also own the property that's 100% of the north boundary of this property, so we've got naturally some concerns on what goes on next door regards to the fish. My grandfather, if he was alive, could tell you stories of picking salmon out of the creek with a pitchfork. And on my phone there's a video of my driveway, so I'm above Woodward Rd. by two properties and we had a couple dozen fish make it this year. It was great year for the coho. I can say as my childhood memories we went out picked them up, took picture and then put them back. So they've always been there and they're doing well. In fact Napavine school science class has been releasing coho salmon into that creek, except for the last couple of years because the tank failed, so they lost the batch. So there is definitely fish there and the Fish and Wildlife came to my house this year, asked permission, walked the creek, did their documentation whatnot so.

I'm on the school board, we all want a middle school. The concern is it's a big promise. When we went out to bid for the middle school, I think it was like $8 million. The proposed construction was about $600,000 or something. It was in the hundreds of thousands, nowhere near that so. The loopholes to get there, there's a lot of insecurities around that. The board wanted some assurance that if this goes sideways and we have a foundation and nothing more, how do we finish? We want it bonded for what it takes for us to finish it. And that's where this conversation turns a little bit that that's a big ask and we understand that, but we don't want a halfway done project with undue burden then on the school to come up with additional money that we don't have and bonds that we can't pass. Because even those that support don't always vote yes because they can't afford even if they do support. So we just don't have that. And without high dollar homes in the area, we're not going to bring affluent people to the area that want large lots and whatnot is kind of the feel for what might bring that.

Mikota shared a video on his phone of the fish at his home that was taken November 2024.

**Paula Anderson – 266 Woodard Road** (begins at 47:44 mark)

I think that it's natural for Napavine to want to grow our community. If you have a nice community, the community wants to grow and people want to live there. As a parent with children in schools one of the reasons that we moved to this community was for good schools and a good quality of life for our children. And I think that people coming to our area would want the same thing. And so if you look at some of the other school districts in the state of Washington, some areas that have had tremendous growth have really great school districts. And that's the key is a parent. What we're looking for is a really great school for our kids. And when you have a good school, then you can have a good community and then you bring people in looking specifically for a good school district. So if we're building family homes and we're wanting to grow our community, I think we should be growing our school. Let's put the horse in front of the cart and not the cart in front of the horse. We don't build the homes, we need to build the school because the second we have a great school, just like Camas Washington, they will all come to us. So, I think with this development, we're not necessarily looking at building our community we're just building a housing or a subdivision. So, what if we look at building our community? I know Chehalis just put in housing development off of Rush road, and one of the things that they did in that development is they actually set some lots aside for community spaces. So they have a park area, they have other things like that to build community. I have no problem with growth. I don't necessarily want 195 houses right across the street from me. I don't think it fits with the Woodard Road area. But I think as a community, if we are going to grow and build money for our Community, just like the previous speaker said, we want really nice houses and a wonderful school because when we have those things, the people will come. So, I just want to say thank you very much for opening this up for public comment so that we could come and talk about that.

**Ron Johnson – Woodard Road** (begins at 49:55 mark)

Yeah, I'd just like to repeat a little bit about the Allen Creek and the salmon run. It's a real thing and it is not a drainage corridor as it's been called. It is a real salmon bearing creek. You guys can do whatever you want and dig whatever ponds and retention ponds from this pond to that pond you want. But that water is only going to sit in them ponds until the pond gets full and then it's going to run right over the top and out of the pond. It's going to do nothing just like this pond that's down here at the Stadium Heights, it holds mosquito water all summer long. OK, the ground doesn't suck up the water. It goes in the pond. When you got a bucket, it's full of water. You put a cup in, cup comes out. There's only one corridor right now, it's a creek. And that's Allen creek. It's not a drainage corridor and all that water coming off them 195 houses up there is going to hit that creek. It's just going to destroy the creek. And I'm kind of confused right now because Fish and Wildlife is doing an investigation on that Newaukum river, there's a $75 million grant, I believe, to restore the new Newaukum River,

**Ron Johnson – Woodard Road** (continued)
and that's about to begin. And I would think that if Fish and Wildlife was really concerned about restoring the salmon runs like what was in the article in the Daily Chronicle the other day, a couple weeks ago. They would be concerned about the creeks, the tributaries to the river because the salmon don't spawn in the direct river. They go up to the creeks and the creeks are all destroyed. They're destroyed by beavers, they're destroyed by all kinds of things. When we lose 1 little creek, that's just one other tributary that's feeding. That's salmon back into the Newaukum river, so I hope the Fish and Wildlife does their job and they figure that one out because there's a lot of salmon trying to spawn up that thing. And that Creek is a mess. It's all plugged up and and and it can't drain properly. The Beavers, since we've not been allowed to trap them. Not just destroy all these crooks around if you don't believe it. Look at the Dillenbaugh Creek. I can show you the whole thing. Beaver dams everywhere. There's only one way down that hill for that stormwater, and that's Allen Creek, not another drainage corridor. I rest my case.

**Aaron Anderson – 266 Woodard Road** (begins at 53:07 mark)
Was wondering if his address was going to change. He thought this project was moving the city limit lines, got this project mixed up with another project.

**Jeremy Johnson –Woodard Road** (begins at 55:00 mark)
How is it not a conflict of interest to have the wife of the head of the Planning Commission on the Planning Board?

**Commissioner Haberstroh –** (begins at 55:10 mark)
I would think that probably needs to be taken up with the City Council, that has nothing to do with us.

**Jeannie Johnson – 282-23 Woodard Road** (begins at 55:23 mark)
I don't have a prepared statement, but I do want to just say that growth is inevitable. It's going to happen and you can't stop it. But I really don't think that Woodard Road is the right place, the road is narrow. We live in a community of people I feel like I can say for everyone that we like how it is. We like our road and we like the peace and quiet and we enjoy the birds and the deer are going through. We really, really like that and like to keep it that way. But like I said, you can't stop growth, but if there was another spot, we'd be happy to shove them over to somebody else.

**Kelsey Graves – 277 Woodard Road** (begins at 56:29 mark)
I've lived there about 17 years and raised my 8 kids there and we have thoroughly enjoyed it because of the space that is there and the ability to go on walks and feel safe. We previously had permission to walk that property, we call it the chicken farm, so all of our kids have enjoyed spending time out in nature and the gift that it is. But beyond the personal joy of it and just the livelihood that we enjoy there. I am very concerned about the traffic and safety issue that it's going to bring. I still have a young daughter with a disability, and I have grandkids that live on that road now too. I also am concerned, as everyone else for the school and just the impact that it's going to have on our town alone. It doesn't seem like just our town can handle that much traffic. And the backup that we already have a little bit of on Rush Rd. exit there, so thank you for hearing our concerns and allowing us to speak and hopefully we can make something work that will benefit everyone.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 58:43 mark)
Because I think as you heard from staff presentation, this is about phase one. This is the preliminary plat for phase one, which as stated in the proposal, it's 56 homes. It is true that there is a vision for the full build out of 195 lots for the full phase one and phase two. But what's before you tonight is Phase 1. Again, this project has gone through very detailed review as you saw from the outset, there was a timeline that staff presented where we've been at this for about two years now. As you've heard numerous, you know, staff reports, agency reports, numerous agencies have been involved. We heard members from the public talk about Fish and Wildlife. They've been involved, also Department of Ecology. This has gone through a pretty exhaustive review at this point. I have with me at this table are one of our experts who's the project engineer. He'll speak to a lot of the issues. We also have our wetland biologist as well as our traffic engineer here too. So we'll be talking a lot of these issues and do our best to answer the questions from the community. I encourage you all to get involved in the Comprehensive plan because that is the root policy document that then leads to all of the development standards that guide growth. And this project, our sole question that we have here today is does this project comply with the code and the applicable regulations. It's not about is it appropriate given you know trajectory of. This Planning Commission, the Community, have already answered that question in the comprehensive plan. So I just wanted to clarify that just to provide that introductory, because I do think it's really important to frame the conversation.

**The Q & A between the applicant's attorney and experts are simplified, the recording is more detailed and verbatim. She provided the experts resumes to the Planning Commission (part of the record.)**

**Andrew Harris – Project Engineer – Momentum Civil** (begins at 1:04:53 mark)
He is the principal engineer from momentum civil and is the project engineer for this plat. Himself and staff under his direction prepared the documents presented for roads, utilities, proposed lot lines, buffer, and road widening on Woodard Road. I've He has been a professional engineer for 17 going on 18 years. He's worked on many master plan communities. Many plats of this size and many street and utility improvement projects.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:06:43 mark)
Asked questions for clarification below to Andrew Harris.

1) Does the project documents refer to stream one. Could he clarify the issue of stream 1 Allen Creek and whether it has been categorized as fish bearing?
2) Please describe the stormwater system.
3) Are there currently any pesticides on the property that you know of? Any stormwater treatment on the property currently? So would all the stormwater in the future is actually being collected and then treated before being discharged into the stream, is that a net positive?
4) Can you describe what the actual build out on Woodard Road looks like for this project?
5) We did hear from Miss Serl, she had a question regarding the curvature of the road, and I just wanted to clarify, does this issue pertain to the scope of the project for phase 2 as opposed to phase one?

**Andrew Harris – Project Engineer – Momentum Civil** (begins at 1:06:49 mark)
Response to questions above.

1) He stated in the SEPA documents and in the critical areas report stream 1 is Allen Creek and that is described as a Type F fish bearing stream as shown on all the documents by the Department of Natural Resources, the fact that it is fish bearing has not been disputed and the standard buffer of 150 feet is what was held as the basis of the project design. There is provisions in the Code of the City of Napavine for a reduction in the buffer with mitigation, and that mitigation has been added to the plans and a 110 foot buffer is what is shown on the preliminary plat.
2) The field is currently a grass field, and the Department of Ecology has requirements that when we go about a project like this where we actually, unless we can prove that it has always been grass and that it was historically a Prairie, which we cannot, we are supposed to model it as if it is a forest, a mature forest. And the existing condition of a mature forest will form the basis of our runoff file that we need to provide out of the pond. So the model that has been run mathematically using the Western Washington hydrology model, which models rainfall for decades. This has been run through the pond file and what it shows is that we were able to capture all stormwater from this development, including its roads and roof surfaces, capture them in a pond and then treat that stormwater prior to its outfall to Allen Creek. So the treatment standards are the basic water quality treatment standards, which are required for residential properties. That is what we are following and what is proposed.
3) Yes, that could be said.
4) So at this time, what's proposed for Phase 1 is a street improvement that looks like a sidewalk along the north side of Woodward Rd For the length of the project and improvement, and then running West all the way to connect to existing sidewalk, so it will have safe pedestrian connectivity along Woodard Road from phase one westward into town and to school. And then in addition, the road will be widened northward for the project frontage, so that that lane from center line N to the curb line will be 17 feet plus the width of the gutter pan so you end up with 18 feet plus the existing S lane on Woodward Rd.
5) During the sight distance analysis for Phase 2, sight distance deficiency was identified along the horizontal curve. That is a phase 2 issue.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:14:18 mark)
Provided a resume to the Planning Commission for Aaron Van Aken, Traffic Engineer for the project.

1) Please describe your role with the project.
2) Can you briefly describe your education and professional credentials?

3) Did your traffic impact analysis cover both phase 1 and phase 2? But we are just talking about phase 1 right now, correct? Can you discuss fundamentally what the level of service standard means?
4) What is the level of service standard again for the city and Washington state? Based on all of the data you collected, will the project fall under and meet the level of service D?
5) Did you also evaluate whether additional mitigation like left turn lanes or anything like that would be warranted by the amount of traffic generated by the project and what was the conclusion?
6) And I just want to be really clear here, this is scientific. These are these are numbers, there's not a whole lot of discretion that you have here. This is you collect information, you collect the data, you run it through the models and the numbers are what the numbers are.
7) So based on your traffic impact analysis, does it conclude that particularly for phase one, the project does not generate significant impacts, meriting additional mitigation? And does it comply with all level of service standards, and any other standards?

**Aaron Van Aken – Applicant's Traffic Engineer – Heath & Associates** (begins at 1:14:18 mark)

1) I'm a licensed engineer in the state of Washington, and I'm a principal engineer at Heath traffic. We conducted the traffic impact analysis for this project, and I was the the lead engineer on the project.
2) I've got an engineering license and a degree, and I've been a principal at the firm for about 10 years now and total about 13 years of experience.
3) Yes, So level of service is a metric that we use in traffic engineering and it is a measure of the roadways, capacity and efficiency and it's graded like a report card that goes A through F where A is basically you go up to an intersection, you experience no delay where F is extreme congestion, where you don't get through a signal on the first cycle. And so that would be over saturated or what's considered a failure. And so the city of Napavine as well as WSDOT have a level of service D standard, which means in the peak hour, which is typically defined between 3:00 and 6:00 PM, you're looking at the busiest hour of the day and you're measuring that level of service. And once it exceeds D, so where if it goes to an E or an F then you start looking at mitigation or improvements to fix that deficiency.
4) D – D as in dog. Yes, It does, and that's in aggregate. We didn't break out phase one independently, so yes.
5) We did, the conclusion we looked at left turn lanes at Woodward Rd at the site access along with the main intersection at Washington and Woodard Road, and both of those did not meet the minimum thresholds, as set by the WSDOT warrant nomograph, and that's all documented in the report.
6) Correct, and the turn lane as a threshold based on the arrival rate, and it's just a clear line, if you exceed it or you don't exceed it. So it's pretty cut and dry.
7) Yes, it does.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:20:17 mark)
Introduced Timothy Haderly, the wetland biologist and provided the Planning Commission his resume.

1) Please state your name for the record, and briefly give the Planning Commission just a summary background regarding your education, your credentials?
2) You said you're the project biologist, can you just describe what that entails for this project?
3) And is it your understanding that a critical areas report was prepared for this project? And can you explain what is a critical areas report?
4) And is it safe to say that it is prepared by and typically by an experienced biologist or scientist? Is it performed in a scientific manner?
5) Did you by chance have any interactions with any state agencies in connection with this project?
6) Are there any wetlands located within phase one?
7) In this case, is Stream 1 the same stream that we've heard being referred to as Allen? Is that identified in all documentation as a fish bearing stream? And that is known as a type F stream?
8) How does the code address the fact that it's a type F stream and that there is a need to protect the type F stream?
9) So the code therefore requires a create area of protection, meaning a more significant buffer?
10) You mentioned mitigation measures, referred to as enhancements. What are those in regard to this development?
11) So the enhancement work you just discussed, you said there will be, is it right that there will be restoration of native plantings and other ecological functions that will improve the wetland?

12) Is it accurate that Fish and Wildlife is very much aware of this project and has been involved?

**Timothy J. Haderly – Applicant's Wetland Biologist –** (begins at 1:20:17 mark)

1) Timothy Haderly, I am the project biologist. My degrees are in terrestrial biology, chemistry and freshwater studies, and I've been consulting for approximately 36 years.
2) For this project, I was tasked to evaluate critical areas, including wetlands and streams, evaluating potential impacts. If there were impacts, developing a mitigation plan to mitigate for those impacts.
3) Yes it was. Critical Areas Report is basically a document that outlines everything that's on the site according to city code and it includes wetlands, streams, any other potential habits or species that could be of concern.
4) Yes, it's required to be prepared by somebody that has the qualifications. Yes, I did not do the critical areas report on this project. It was done by a previous consultant, but I reviewed it and I agree with the report.
5) Yes, I had e-mail correspondence, telephone, and I walked the project site with both Fish and Wildlife, and Ecology. The end result was they agreed with the critical areas report the project as designed and a proposed mitigation.
6) Yes, there is a corridor wetland associated with the fish bearing stream. That is identified on the plans as Wetland A, the fish bearing stream is identified as Stream 1.
7) Yes. it's definitely a tributary of the Allen Creek watershed. Yes, it is identified as a Type F, fish bearing stream.
8) Typically, the codes the the higher quality of stream gets a wider buffer. So if it's a seasonal stream with no fish buffers are typically smaller in width.
9) Yes, that's correct. The buffer is typically 150 ft, but the buffer being provided is 110 ft. With exceptions, the 110 feet says that you have to mitigate for the impacts to reduce the buffer. We have a unique situation here. We have both a fish bearing stream and a wetland one in the same, so you always use the most extreme buffer associated
10) Providing enhancement of areas that are now grass field, we will be planting trees and shrubs so the pink areas are actually areas that are going to be wider than the 110 foot buffer and in some areas they're actually greater than 200 feet. So we're actually going above and beyond the 150 ft.
11) Yes that is correct.
12) Yes, very much. I walked the site with the Fish and Wildlife Staff member and we agreed that this stream is a fish bearing stream has fish in it and needs to be protected.

**Bryan Morris – Director of Public Works/ Community Development** (1:30:42 mark)
Asked Mr. Haderly if the cities wetland code has been reviewed and adopted by Department of Ecology?

**Mr. Haderly** stated yes all city codes with respect to critical areas are reviewed and approved through ecology and other agencies through a process.

**Dan Mikota** (1:31:26 mark) – Raised the fish concern with the pumped sewer laterals that will be included in phase 1. Also the sight distance was an additional concern.

**Ron Johnson** – Wanted to know the treatment of stormwater. And what percentage would you say that it purifies the water?

**Drew Harris** (1:34:04 mark)- State of Washington Department of Ecology has a process. It's called the tape process and it's quite rigorous. And in order for a stormwater treatment device to be approved under that process, it needs to be tested and tested and tested again, and the place that they do that is under the bridge in downtown Seattle, where it's testing highway runoff from Interstate I-5. That's the tape process for stormwater quality treatment and when devices are being developed, they get run through the process where the influent and the effluent are measured and the efficacy of the treatment is able to be shown through a study. So for this development, we propose to use not only a detention pond which does allow for sedimentation to occur as the water goes in and sits, it settles. You have a lowering of total suspended solids during that process, but then subsequent to that it will be run through a filter system and those filters normally include a combination of sand media, granular activated carbon and other mechanisms that reduce the load of pollutants. Significantly, that would be going into the creek. The percentage depends on the type of pollutant. There's different types of parameters of concern that are measured

and zinc is one of the pollutants total suspended solids, turbidity. These are the types of pollutants and the percentages are normally in the 90 to 95 percentage, but it depends on the parameter of concern.

(In regard to Dan Mikota's question above) The sewer lift station is required to be able to pump sewer effluent from this development, either from phase 1, or phase 2 the sewer cannot be extended through gravity to feed this development, so it will be installed under phase one. But the grading around that will be specific just to the lift station pad area and that's shown in the phase 1 documents so that the whole road will not be widened at that time, but the lift station pad will be constructed and all the lots in phase 1 will have sewer that will drain and then a pumped main will go connect to the existing city sewer.

We have stated on the documents that further study of road curvature and mitigation if required, will occur under final engineering design and that's noted under the preliminary plat documents. It's common that these items are figured out during the engineering design phase, not at the preliminary plat phase.

**Kelsey Graves – 277 Woodard Road** (1:40:40 mark) Stated that D is not a good grade for a traffic report. It may be passable, but not something that she would be excited about for the town.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:41:37 mark) Spoke regarding the school capacity issues.

I first want to acknowledge not only to the school district, which I think has been acknowledged by the applicant, but also to the public, that we fully are aware and understand that school district has been experiencing overcrowding and needs funding to address these existing deficiencies. There are several methods and options to address this issue. I think the Commissioner's comment is very well taken that one option is for the Community to get really behind the school district and go forward with the bond and to own that issue and really get to the heart of the funding problem. I understand that that's been proposed and unfortunately it has not passed. So that's one of the reasons why unfortunately the community is experiencing this issue at a more local level. It's also been mentioned that the city could adopt a formal impact fee. But again, that also has not been successful. And again that's one option for the city to consider. The Council for the school district mentioned SEPA and exercising the city's jurisdiction, their substantive authority under SEPA to impose SEPA conditions. Before you, you have what I believe is exhibit 28 and I'll get into this a bit more in this circumstance and I stand by and I know the unpublished case that Council referenced. The city unfortunately does not have the ability to exercise sepa authority in this situation because there's not a stated policy adopted in code. The code that was referenced by counsel is a very general reference to resources. The case that is referred to by Council again, it's unpublished and it does not actually address the issue of whether a broad policy regarding resources actually captures school funding under the environment. If you look at the WAC, the Washington Administrative Code, specifically one 197-11-444 that specifically delineates the elements of the environment, there is a definition for resources. And then there's a separate definition for public services. Resources are things like energy, physical resources. Public services includes school funding and things like that. The city's code references resources, it does not reference school funding or other public services. So again. And I would argue, and you know, unfortunately we might have to argue at a litigation level that unfortunately the city just doesn't have the ability to exercise that SEPA authority in this instance. All of that being said, we do acknowledge that this problem exists and the applicant does want to be a good community partner here. You heard Council talk about that there was a negotiation, there was willingness by the applicant to build a middle school building, again ongoing negotiations about numbers and things like that. Hit a curveball when this report was produced by OAC. I assume you know at some point, if you haven't already, that the Commissioners will read that report. And fundamentally, the critical problem with the report is it analyzes, it assumes impacts from 195 lots and from on that basis it goes into all sorts of calculations based on overcrowding and various, you know, data points that the school district is putting forward. We don't have a project before you for 195 lots. We have a project before you for 56 lots. Again, the calculations, the cost estimates, all of the overcrowding data, it's based on an assumption that we are going to build 195 lots. Your scope, your authority right now is to condition the project for 56 lots. OK, reading the OAC report and even the supplemental report. And again, I'm a lawyer. I don't dabble in numbers purposely because that was not my calling in life. However, my read of the OAC report are there are two categories of overcapacity concepts here. There is in section 3.1 in enrollment capacity issue where they identify that the high schools over capacity by 59 students, they also acknowledge that the elementary school still has capacity. Then the report gets into what I'm going to call physical capacity issue and in that context they say that the school district is over capacity by 110 students at junior and high school level on that basis, they used the 110 student capacity over capacity issue to generate that calculation. Again a calculation based on 195 lots, not 56 lots, 195 lots. Then the consultant submitted a supplemental report, I think tried to explain this difference in overcapacity data and bridged the gap there. That supplemental report explained that the 59 student enrollment over capacity number it's based on that lower number it's based on objective third

party data from the office of Superintendent Public Instruction and it's based on information that doesn't actually reflect how the school district puts children in classrooms and how they organize their classrooms and things like that. That's how that 59 over capacity numbers reach. The 110 over capacity number is, however, based on the data provided by the school and those real world internal decisions about where they place children in classrooms. There's a delta there. I don't know how to really bridge that delta, but it seems to imply to me that to some degree there are decisions that are being made by the school district that result in children being placed in over private classrooms to a degree, to a degree, I don't understand why a third party, you know, state sponsored institution would come up with a lower capacity number. Again, we fully acknowledge that there are impacts, but the report at least calls into question what the calculation should be. And it calls into question the fact that it severely overestimates, if not more than doubles the amount of impacts, because it's based on 195 lot buildup as opposed to the much more limited project that's before you, which is for 56 lots. So with all of that, again acknowledging that the applicant does want to be a good community partner, we are, you know, still trying to find a solution here. We acknowledge that staff drafted a condition regarding that voluntary agreement. We understand that that effort was, you know, to try and bring the parties together and I'm going to say candidly kind of push the issue back to the school district and the applicant to figure it out. We understand the rationale behind that. The problem is, is that there's a basic tenant in permitting and land use law that conditions have to be implementable, they have to be achievable. That condition as drafted that we just have to go and try and get a voluntary agreement is fundamentally, unfortunately flawed because we have no way of guaranteeing that we can reach an agreement with the school district. So that condition is a huge legal risk and problem. That's why we drafted the condition that we sent to you last week, I assume in your packeting your record for the $4000. It's a straightforward condition. It's a significant amount of money. There's certainty there. It provides for the impacts from the actual 56 lot development that's before you. And we think it's an honest and good fair proposal. So with that, we respectfully request that you do advance this proposal that you adopt staffs recommendation for the most part with that revised condition and we request that you advance this to Council.

**Parker Howell – Napavine School District Attorney** (begins at 1:50:47 mark)
Again, there are a number of factual and legal arguments that I wanted to address that the developers attorney has raised. First of all, this school district hasn't received a copy of a proposed amendment to the staff report or the conditions that would impose a $4000 per unit fee. (Provided the letter to him at that moment) The district would certainly be in favor of the Commission imposing a per unit fee. You know, without negotiations, in which case we'd ask that you impose the $6000 fee that we had proposed in negotiations. I have now received a copy, which I'll briefly read over here. To the extent that the developer through this submission, is admitting that there's authority of the Commission to impose a per unit fee, we would suggest that a $6000 fee is more appropriate. It's still less than the over $7000 that's calculated per unit based on what OAC did in its third party analysis. And even that 7000 is based on the cost of temporary, temporary facilities, in other words, putting continuing to put students of the Napavine community into portable buildings, rather than having a long term solution of a new middle school or whatever the necessary facilities would be. Now Council for the developer would have you believe that the solution is a magic bullet of passing a bond. We all know what bond passage rates are in state of Washington, but that argument dodges the key point and the key point is under state law, both SEPA and the subdivision statute, it's incumbent upon the city as a legal duty to provide for what is in the state constitution. The paramount duty of this state, which is adequate schooling, which is facilities in this case. Developers, as they develop, owe to the community they're responsible proportionate share. The developer has further tried to cloud the issue about the OAC report and say it's uncertain what the quote delta is between what OSPI, the state agency overseeing public education, says should be the number of students that you have for facility planning purposes versus the number of students, suggesting that there's mismanagement somehow by the school district that's resulting in Overcrowd. Members of the Commission that is simply not the case. OSPIO, the state agency that oversees education uses that number that was first referenced by council for purposes of how much money they're going to give school districts and state construction assistance programming, or SCAP funding. So it's a rote formula that doesn't deal in everyday realities. But rather comes into play when the state is trying to figure out if you're generally going to house X number of students, how much square footage and how much cost is that going to entail. The higher number, the roughly 110 that Council referenced and admitted is in the report. On the other hand, is based on real world, on the ground reality, and that is that there's a large number of students who have to be housed in portables. Council also attempted to call into question how many students are going to be generated by this development, saying that it's inappropriate to base this on 195 units when this is phase one for 56 Units. Earlier in her presentation, Council, though, admitted that it is appropriate in the SEPA context to look at the total impacts of the entire development, which is what this report has done. Further, there is no reason to distinguish between the 195 units and the 56 units in terms of what that per student impact is going to be. Every additional student is generated when the facilities are for all intents and purposes, full, is going to generate an impact. Further, we're not asking the Commission to impose the more than $20,000 per unit it would cost likely to actually house these students on a

permanent full-time basis going forward. We're just asking for the roughly less than the 7000 that's actually needed on a temp basis. We're asking for the 6000. Now going to the issue of the code, there is case law that exists that discusses the fact that even references that are somewhat oblique and incorporations by reference of the SEPA policy into Napavine Municipal code are sufficient. The fact that the case in Division 2 is unpublished doesn't change the fact that at least one court has looked at the method that was proposed by staff and said that that was a lawful method, that being the senior housing or reaching a voluntary agreement. And it's certainly not impossible for the parties to reach agreement. That said, it would be much simpler again, with the understanding if the developer believes that this Commission has that authority, the right thing to do here would be to impose the $6000 per unit fee, and that's what we asked you to do today to make sure that all of the students of this community have an adequate place to study and learn.

**Commissioner Morris** – (1:56:22) - Asked if the school is overcrowded now?

**Parker Howell – Napavine School District Attorney** (begins at 1:56:31 mark)
So according to OSPI SCAP school Construction Assistance program, formulas have to do with the money that the state sends. If you pass a bond, for example they would say that the elementary school has capacity, but not at the high school. In reality, the issue is that there are dozens of students every day, largely at the middle school, from remembering the report correctly, who are learning in portables. No school district in the state of Washington considers having students in portables as permanent housing. So in that sense, there is overcrowding as it exists currently. The district also uses, as most places do, a formula to figure out how many students can be assigned any classroom. There are collective bargaining agreements with the teachers union that dictate that as there are in most school districts, and so if even if the district said somehow fire code would permit us to 50 or 60 students per classroom. The teachers agreement wouldn't allow that. So yes, the districts facilities are full as it stands currently, and it's incumbent on this particular developer to not pay for everything but pay for its fair share of the facilities that are needed. We're just asking on a temporary basis. even with more portables.

**Commissioner Morris** – (1:57:51) – How many out of district students are actually in Napavine now?

**Parker Howell – Napavine School District Attorney**
Referred that question to Mr. Schutz, he stated 92 out of district coming in, but have 136 students that are going out to other districts.

**Director Morris** – (1:57:51) – Stated that he's all for the schools and is it fair to say that you cannot split a SEPA? And that the law says that the city will give consideration to the school, and does it not say at an adequate level? Who makes up the definition of adequate and consideration?

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:41:37 mark)
Stated it is true, that and that's what we were reflected here that under SEPA, but you are not supposed to or allowed to piece meal environmental review, which is why the phase 1 and Phase 2, all that information was provided so to the extent that phase 2 does proceed, which again don't know but to the extent it does proceed, those environmental impacts have at least been flagged under the SEPA authority.

**Paul - Jackson Civil -** What you do here under phase one from a land use standpoint, when you do hear from a phase one standpoint sets the stage for how we approach Phase 2.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:41:37 mark)
But under a fundamental, you know, just permitting perspective, the only thing that's before you is phase 1. So the only conditions that can be attached are with respect to phase 1.

**Commissioner Haberstroh** – It's not my call on y'all's negotiation, but I think that's something that you guys aren't too far off ought to be able to come up with some type of solution there.

**Nicole De Leon – Applicant's Attorney –** Requested a 5 minute recess at 8:01 pm.

**Meeting resumed at 8:09pm**

**Nicole De Leon – Applicant's Attorney –** (begins at 2:09:08 mark)

For the record, this is Nicole DeLeon, the land use attorney for the applicant. After conferring with the school district and council for the District, I have some good news, which is that we have reached a specific condition and amount. It is a version of what was submitted to you with some modification. I'm going to read it aloud into the record and then I think Council and I can ultimately submit a co-authored letter or e-mail with the formal language, but I'll at least read it to you just so that you're aware of the verbiage that's been mutually agreed upon. And so if you're referring to the letter that we submitted last week, that would be revised to read. The applicant shall pay a voluntary school mitigation fee of $6000 per dwelling unit with payment required prior to issuance of each individual building permit and paid to the Napavine School District in consideration for school impacts from phase 1 and phase 2. The school district in council and the applicant have agreed to that voluntary mitigation condition. We think that satisfies the school districts concerns regarding impacts to schools from this project on the grand scale. And again, we'll provide that language so that hopefully the Planning Commission can incorporate that into its recommendation to council. So thank you for the nudge and I think we got to the finish line on that particular issue. That concludes our presentation.

Discussion continued on how to provide the recommendation to council between city consultant, Planning Commission, and city attorney.

**ADJOURNMENT** 8:12 pm

**Commissioner Graham closed the public hearing at 8:12 pm.**

*These minutes are not verbatim. If so desired, a recording of this meeting is available online at https://fccdl.in/D5zYIvz5Dm.*

**Respectfully submitted,**

Bryan Morris, Community Development/Public Works Director

Deborah L Graham 6/16/25

Planning Commission Chairperson

# NAPAVINE PLANNING COMMISSION MINUTES
**June 2, 2025 6:00 P.M.**
**Napavine City Hall, 407 Birch Ave SW, Napavine, WA**

**PLEDGE OF ALLEGIANCE:**

**INVOCATION:** Invocation was led by **Director Morris**.

**CALL TO ORDER:**
**Commissioner Graham** opened the regular Planning Commission meeting to order at 8:14 PM

**ROLL CALL:**
Planning Commission present: **All Present**

**APPROVAL OF AGENDA – As presented:**
**Commissioner Hollinger motioned to approve the agenda as presented, seconded by Commissioner Morris. Vote on motion 4 ayes, 0 nay.**

**APPROVAL OF MINUTES:**
**Commissioner Haberstroh motioned to approve May 19, 2025, regular meeting minutes, seconded by Commissioner Torgerson. Vote on motion 4 ayes and 0 nay.**

**CITIZENT COMMENT:**
**Paula Anderson – 266 Woodard Road –** Wanted to strongly urge all to listen to the comments of the community and is not in favor of the proposed project.
**Jeremy Johnson – Woodard Road –** Wanted to reiterate what Paula said. Completely opposed to the project.
**Marissa – City attorney** stated that the Public Hearing is closed, and no further comments need to be heard.

**NEW BUSINESS:**
1. **Tiger Meadows Development**

**Commissioner Morris** asked the City Attorney Marissa to confirm that the applicant has followed all codes and regulations that the city has put forth. Marissa confirmed yes but added that there are a lot of conditions that need to be met for this project. It is very common for designs to change before they come to the final plat, which the council must approve.
**City Attorney Marissa** requested a minor recess to confirm the correct language on the motion with the applicant's attorney and school attorney.
Meeting Continued….
**Commissioner Morris** asked the city attorney that as planning commission that they can't base any decision on personal feelings, correct? If they follow codes and regulations, there isn't anything the Planning Commission can stand in the way of? Marissa stated that it was correct.

**Commissioner Morris motioned to approve the staff report conditions subject to receiving the condition letter for school mitigation from the applicant and school district, seconded by Commissioner Haberstroh. Vote on motion 4 ayes and 0 nay.**

**Commissioner Haberstroh** added that he liked what Amy said about personal feelings. He lives down the road from 600 places that were permitted, they met all the requirements and there is nothing we could do. That's just growth, it doesn't mean it's good.

**GOOD OF THE ORDER:**
Director Morris stated that the community should be thankful this housing development was approved now at 7500 sq. ft. and not later, the state is making the lot sizes to go down to 4,000 sq. ft. Paul with Jackson Civil said that isn't

technically true, it has to do with the city's comp plan, he encouraged citizens to show up for the comprehensive plan.

**ADJOURNMENT** 8:29 pm

**Commissioner Morris** motioned to adjourn, seconded by **Commissioner Hollinger. Vote 3 ayes, 0 nay.**

*These minutes are not verbatim. If so desired, a recording of this meeting is available online at https://fccdl.in/D5zYlvz5Dm.*

**Respectfully submitted,**

Bryan Morris 6/16/25

Bryan Morris, Community Development/Public Works Director — Planning Commission Chairperson

DATE: June 16, 2025
CLIENT: City of Napavine
CONTACT: Bryan Morris
CLIENT PHONE: (360) 262-3547
CLIENT ADDRESS: 407 Birch Ave SW, Napavine, WA 98565
JOB NUMBER/PROJECT TITLE: Jefferson Pump Station Improvements

## STATEMENT OF UNDERSTANDING

This Scope of Work (SOW) describes the estimated efforts to provide engineering services during construction support to the City of Napavine (City) for the construction phase of the Jefferson Pump Station Improvements Project (Project). The Project was designed by BHC Consultants, LLC (BHC) in association with Jackson Civil Engineering (JCE). These services will offer engineering office support, field support, and project closeout assistance.

The scope of the Jefferson Pump Station Improvements construction work generally includes:

- Mobilization and demobilization.
- Temporary erosion and sediment control.
- Temporary bypass pumping and temporary power.
- Demolition of existing building, pumps, piping, valves, controls and electrical equipment, removal/replacement of the top slab of the lift station wet well and conversion of the dry/wet well configuration into one (1) wet well with submersible pumps.
- Recoating of the existing dry/wet well structure.
- Furnishing and installation of two (2) new submersible pumps with a pumping capacity of 400 gallons per minute (gpm) per pump.
- Furnishing and installation of all required piping and appurtenances.
- Construction of equipment canopy and hoist.
- Construction of a new electrical rack.
- Construction of a valve vault with a bypass connection.
- Construction of all site restoration, including but not limited to fencing, concrete slab, and other general restoration.
- Providing testing, startup, commissioning, and training as specified herein.

Office support provided by the design team members during this period is for review and providing input on Requests for Information (RFIs), Submittals/Shop Drawings, review and input on Work Directives, Contractor Pay Requests and Change Orders. These efforts are to be estimated based on projected quantities for each form of construction correspondence, as assessed by the number of drawing sheets and technical specifications relevant to each. Consequently, the labor efforts and budget included with this SOW are mutually recognized by JCE and the City as estimates. Review and administration of construction correspondence exceeding the stated quantity assumptions will require a contract amendment and budget adjustment.

## SCOPE OF WORK

The SOW tasks are separated into four components where applicable:

1. Work Tasks: tasks that will be completed by the Consultant;
2. Receivables: elements that will be provided by the City; and
3. Assumptions: assumptions used to develop each Work Task; and

4. Deliverables: the finished product that will be delivered to the City in electronic format.

JCE proposes the following task elements within this SOW:

### Task 1 – Office Engineering Support During Construction

The following subtasks are estimated office-based activities that will be conducted from Project initiation through completion of construction, commissioning of the pump station, and acceptance of the work by the City. The estimated total Contract time from Notice to Proceed (NTP) to Physical Completion is approximately six (6) months.

**Work Tasks:**

1.1 **Project Management.** Design team will assist the City in administering the construction contract and providing engineering and technical support regarding requested administrative, technical, and information needs over a ten (10) month duration (including support prior to mobilization, as well as closeout activities subsequent to Physical Completion). Assistance is for:

- Written and verbal communications with the City and field representatives to support progress and execution of the work by the Contractor.
- QA/QC of construction documentation, including Project Manager oversight of responses to RFIs, Submittals, input or Interpretations, and other construction documentation.
- Project status reports and invoicing.

1.2 **RFI's, Shop Drawings, and Submittals.** Design team will respond to the Contractor's RFI's and will review and return Shop Drawings and Submittals to the City for authorization and return to the Contractor. Design team will generate and maintain logs of RFI's and Shop Drawings/Submittals using appropriate numbering systems, such as the Contractor's Submittal number and the specification section. The logs will track the number of days taken to review or respond to each Shop Drawing/Submittal and RFI and the action that was taken.

1.3 **Interpretations and Change Orders.** Design team will prepare and issue Interpretations and Minor Changes for items having no impact on the Contract price, the Contract time, the means, method, techniques, or sequence of work with respect to the Contractor's operations. When changes in the price or time for the work are agreed upon between the Contractor and the City, design team will prepare Change Orders for acceptance and execution by the City. Logs of changes and directives will be generated and maintained by the design team, including the number of days since action has been taken.

1.4 **Contractor Pay Application Review.** Design team will review Contractor Pay Applications. The City will provide final review, final documentation, and execute payment to the Contractor.

1.5 **Construction Progress Meetings.** Design team will attend weekly Construction Progress Meetings up to 26 total Construction Progress Meetings. Design team will provide the City with input and comments, following each Construction Progress Meeting.

**Receivables:**

- Standard or preferred City forms for RFI's, Submittals, Change Orders, Minor Changes, Tracking Logs, and other documentation preferences.

**Assumptions:**

- The City will act as the Construction Manager.
- Six (6) month duration from Construction NTP to Physical Completion.
- Ten (10) month duration for BHC Services During Construction.
- Scope and fee development costs for these services are included in the Project Management task.
- Design team will attend weekly Construction Progress Meetings virtually three (3) occurrences a month, with one (1) occurrence a month attended in person.
- Estimated effort to respond to RFI's is based on an assumption of up to ten (10) RFI's and two (2) hours of design team Project Manager time and four (4) hours of Project Engineer time to respond to each. It is assumed one (1) RFI will be electrical-related and one (1) RFI will be structural-related. Four (4) hours of Electrical and Structural Engineer time are assumed for each RFI.
- Estimated effort to review and return Shop Drawings/Submittals is based on an assumption of up to 24 Submittals and two (2) hours of design team Project Manager time and four (4) hours of Project Engineer time to respond to each. It is assumed four (4) Submittals will be electrical-related and four (4) Submittals will be structural-related. Four (4) hours of Electrical and Structural Engineer time are assumed for each. Each Submittal accounts for the initial Submittal review and one (1) resubmittal review.
- Effort to issue Interpretations and to develop and facilitate execution of Change Orders is estimated to be six (6) hours each. A total of two (2) Change Orders are assumed. Four (4) hours of Electrical and Structural Engineer time are assumed for each.
- The design team Project Manager and Project Engineer will attend up to 26 total Construction Progress Meetings as requested by and coordinated through the City. Design team's attendance will be virtual three (3) times a month, with one (1) time a month being in person. The in-person meeting will be scheduled and coordinated to coincide with Site Visits under Work Task 2.2. Structural Engineer and Electrical Engineer are assumed to attend virtually up to two (2) on-site Construction Progress Meetings each. An estimated one (1) hour for each virtual meeting is assumed, with an additional half an hour (0.5) by Project Manager and Project Engineer for meeting input and comments to be incorporated into the City's meeting minutes. The travel cost for the on-site meetings will be covered under Task 2.2.

**Deliverables:**

- Ten (10) monthly invoices and Project Status Reports.
- Individual Submittal responses and Submittal log.
- Individual RFI responses and RFI log.
- Change Order and Minor Changes Interpretation.
- Progress Meeting Minutes input and comments.

### Task 2 – Field Engineering Support During Construction

The following subtasks are estimated on-site field activities that will be conducted from Project Initiation through Physical Completion. Design team will provide monthly Site Visits, an onsite

construction observer and a special inspector during the period of Contractor Mobilization through Physical Completion.

**Work Tasks:**

2.1 **Pre-Construction Conference.** Design team will participate in a Pre-Construction Conference at the City Hall prior to Contractor Mobilization to review project scope, schedule, communication protocols, and City expectations during construction. Contractor representatives in attendance will be encouraged to provide feedback on each, as well as discuss specific topics such as mobilization, staging and storage areas, provision of temporary utilities, and on-site safety and erosion/sedimentation control protocols. Attendees are anticipated to be City Project/Operations Representatives, BHC's Project Manager and Project Engineer, JCE's Project Manager and Construction Observer, Contractor's Project Manager and Superintendent, major subcontractors, major suppliers, impact utility representatives (e.g. Lewis County PUD) and other parties, as appropriate.

2.2 **Site Visits.** Design team will provide monthly Site Visits during the six (6) month construction duration. Construction Observation will primarily be provided by both JCE's Construction Observer and City staff.

2.3 **Discipline Site Visits/Factory Testing.** The Project includes structural and electrical engineering work. It is assumed that Structural and Electrical Engineers will attend two (2) Site Visits, including travel from BHC Seattle office. The Electrical Engineer will also be participating in the Factory Testing of the equipment along with a City operator.

2.4 **Startup and Testing.** Design team will coordinate with the Contractor, City, and manufacturer's representatives for scheduled Startup and Testing activities. This will include the review and supplementation of testing protocols developed by the Contractor and manufacturer's representatives, and verification of the tests and appropriate corrections.

**Receivables:**

- None.

**Assumptions:**

- A two (2) hour Pre-Construction Conference Meeting is assumed with attendance from design team's Project Managers, Project Engineer, construction observer, and project administrator. An additional two (2) hours is assumed for design's Project Manager and Project Engineer for preparation and distribution of the Agenda and Meeting Minutes. Two (2) hours is anticipated for travel.
- It is assumed that design team's Project Manager and Project Engineer will provide on-site Site Visits one (1) day per month of construction for four (4) hours per day. An additional two (2) hours is assumed for average travel time to and from the construction site and one (1) hour is assumed for design team's Project Manager and Project Engineer each for producing and reviewing reports. JCE and City staff are assumed to cover the site observation during the duration of construction. Up to six (6) months is assumed for the duration of construction. Design team's Site Visits will coincide with the weekly construction meeting.
- Design team's Structural and Electrical Engineers will attend two (2) Site Visits. A six (6)-hour duration with an additional two (2) hour travel time is assumed per attendee at

each of these events and one (1) hour is assumed for Project Manager and Electrical/Structural Engineer each for producing and reviewing reports.

- Design team's Electrical Engineer will attend Factory Testing of the power and control panels with a City Operations staff member. The testing is assumed to be eight (8) hours with an additional two (2) hour travel time and one (1) hour is assumed for design team's Project Manager and Electrical Engineer each for producing and reviewing reports.
- The Startup and Testing is assumed to be a six (6) hour duration with an additional two (2) hour travel time per design team attendee. An additional four (4) hours is assumed for design team's Project Manager and Project Engineer for coordination and preparation. Any result of a failed test that requires a separate Site Visit is not included in this SOW. Prior to design team attending Startup and Testing, the Contractor will have confirmed completion of their own testing.

**Deliverables:**

- Pre-Construction Conference Agenda and Meeting Minutes.
- Site Visit Observation Reports.
- Structural/Electrical Observation Reports.

### Task 3 – Project Closeout

The following subtasks are estimated engineering support services that will be performed from the time that the Contractor issues a Notice of Substantial Completion to the closeout of the Contract.

**Work Tasks:**

3.1 **Substantial and Physical Completion**. Following the Contractor issuing a request for review of Substantial Completion, the design team will perform the following series of activities:

- Schedule and participate in a field walkthrough with the Contractor and City staff to review Project completion status and identify any remaining items that are necessary to establish Substantial Completion.
- Provide written notice to the City of Project completion status.
- Develop and distribute an initial Project punch list to the Contractor.
- When notified by the Contractor, perform a field walkthrough and final inspection to confirm punch list items have been satisfactorily completed and that the facilities constructed are ready for their intended use.
- Provide written notice to the City of the Physical Completion date.

3.2 **Record Drawings**. Once received from the Contractor, the design team will use the official drawing set redlines maintained by the Contractor through Physical Completion to prepare final Project Record Drawings.

**Receivables:**

- City attendance and input for final field walkthroughs.
- Contractor and City construction redlines.
- Comments on Draft Record Drawings.

**Assumptions:**

- There will be two (2) field walkthroughs, one (1) to establish Substantial Completion and the other to verify the punch list items were addressed and establish Physical Completion. Each field walkthrough is assumed to be two (2) hour duration with an additional two (2) hour travel time and one (1) hour report time per design team attendee. The initial walkthrough will produce a draft punch list for the City review and input. After each walkthrough, the design team will produce a Project Completion Status report and deliver to the City. Each report is assumed to be one (1) hour for BHC's Project Manager and Project Engineer each.
- Two (2) hours of CAD and one (1) hour of Engineering time will be required for each of design drawing sheets.
- It is assumed the Final Record Drawings will be delivered in electronic (pdf and CAD) format only. The City will not require hard copies.

**Deliverables:**

- Draft and final punch list.
- Substantial and Physical Completion Notice.
- Record Drawings – electronic pdf (Draft and Final) and CAD files will be delivered to the City.

**Estimated Fee**

The Project Budget for this SOW is $300,000.

**JCE Rate Table**

| | |
|---|---|
| Principal | $270/hr. |
| Civil Engineer | $162/hr. |
| Engineering Technician | $125/hr. |
| Project Administrator | $120/hr. |
| Construction Observer | $105/hr. |
| 2-person Field Crew | $190/hr. |
| Mileage | Current Federal Rate |
| Printing/Production | At Cost |

**BHC Rate Table**

| | |
|---|---|
| Principal | $293/hr |
| Project Manager | $206/hr |
| Sr. Structural Engineer | $283/hr |
| Sr. Electrical Engineer | $277/hr |
| Project Engineer | $176/hr |
| Project Engineer | $271/hr |
| CAD/GIS | $194/hr |
| Admin/Clerical | $173/hr |

*By signing this agreement Client is authorizing Jackson Civil Engineering, LLC (JCE) to begin work and is agreeing to the terms and conditions attached to this contract. JCE will commence work upon receipt of this signed agreement and the advanced deposit amount stated above. This proposal is good for 14 days after which JCE reserves the right to rescind or amend this proposal in its entirety.*

| | |
|---|---|
| JACKSON CIVIL ENGINEERING, LLC | CLIENT |
| DATE 6/16/2025 | DATE _____ |

## TERMS AND CONDITIONS

THE FOLLOWING TERMS AND CONDITIONS ARE MUTUALLY NEGOTIATED CONDITIONS OF THIS AGREEMENT, AND ARE REFLECTED IN THE SERVICES TO BE PROVIDED AND THE PRICES THEREFORE:

ADVANCE DEPOSIT: Any advance deposit required under this Agreement may be applied against services provided by JACKSON CIVIL ENGINEERING, LLC ("JCE") at any time during the term JCE provides services under this agreement, including, but not limited to, application against of services last-provided by JCE. Client's payment of the Advance Deposit shall not excuse timely payment of monthly invoices.

PAYMENT/ATTORNEY FEES AND COSTS: Client will be invoiced on a monthly basis. Invoices are due and payable on receipt. Delinquent accounts are charged interest at a rate of eighteen per cent (18%) per annum, and Client agrees to pay the same. Client promises to pay all fees, costs, and expenses incurred relating to the collection of delinquent amounts owed to JCE, including without reasonable attorneys' fees and expert witness fees, fees and costs incurred on appeal, and lien recording and foreclosure fees.

NOTICE OF DISPUTE Client must notify JCE of any invoice dispute in writing within 30 days of the invoice date, and Client's failure to provide such notice during said thirty-day period JCE's invoice shall waive Client's right to dispute such invoice.

REIMBURSABLE EXPENSES: Expenses to be reimbursed to shall be those expenses incurred directly for the project, including but not limited to transportation costs, permit fees, mailing, mileage and other directly related charges. Reimbursement for these expenses shall be on the basis of actual costs.

ADDITIONAL SERVICES: All additional services provided at Client request or due to changes of circumstances beyond the series contemplated in the scope of this agreement shall be paid by Client at JCE's standard rates. Changes in circumstances shall include, but not necessarily be limited to, required changes to JCE's work product under this agreement due to changed legal requirements after the date of this Agreement.

COST AND FEE ESTIMATES: Actual time and expenses may vary from cost estimates and fee estimates, as estimates are only JCE's best projection of costs, and actual time spent and expenses incurred shall be the amount billed.

HOURLY RATES: Jackson Civil reserves the right to amend hourly rates the first of each year.

INSURANCE: JCE is covered by a general liability insurance policy and a professional liability policy, which policies shall each provide for at least $1,000,000 coverage per occurrence, $2,000,000 general aggregate. If Client requires additional coverage in excess of that amount, and if procurable, JCE will obtain additional insurance to the level Client requests at Client's sole expense.

FAILURE TO PAY: Client's failure to timely pay any JCE payment due in a timely manner may result in JCE service suspension and JCE withholding plans, documents, and information prepared under contract with Client. JCE may claim a lien for all materials, labor, and services furnished if any amount due hereunder is not timely paid.

ACCESS TO SITE: Client shall provide JCE access to the site where services are provided, for activities necessary to perform services. Client warrants that it shall have access to the site.

PROFESSIONAL STANDARDS: JCE provides no warranties, but JCE shall provide services with the skill, diligence and judgment exercised by the prudent engineers in the community where services are provided, to achieve the goals and objectives agreed upon with Client. JCE shall

inform Client of progress and changes in conditions that may affect the appropriateness or achievability of some or all of the goals and objectives of the Client specified in this agreement.

TERMINATION- Either Client or JCE may terminate this Agreement by giving 30 days written notice to the other party. In such event, Client shall immediately pay JCE in full for all work previously authorized and performed prior to effective date of termination.

LIMITATION OF LIABILITY: Client waives all claims against JCE and indemnifies and releases JCE from any claim, demand, loss, or liability that Client may now or hereafter have against JCE arising out of or in connection with this Agreement or the services provided hereunder (whether in tort, contract or otherwise); except for claims, demands, losses or liability resulting from JCE's gross negligence or willful misconduct. JCE's liability to the Client shall never exceed the amount of the fee actually paid to JCE under this Agreement. In no event shall JCE be liable for indirect or consequential damages of any kind.

TRANSFERABILITY OF AGREEMENT: This Agreement is between Client and JCE and is not transferable without the written consent of the other party.

OWNERSHIP OF DOCUMENTS: The calculations, drawings, and specifications prepared pursuant to this Agreement ("Work Product") by JCE, whether in hard copy or digital form, are intended for one-time use by Client for this project only. Work Product is and shall remain the property of JCE. Client shall have no right to use the Work Product for one-time use unless all amounts due under this Agreement are paid in full. If Client is in possession of any Work Product and has not paid any amount due hereunder, JCE may demand return of the Work Product, and may specifically enforce Client's obligation to return such Work Product.

INDEMNITY: Client hereby agrees to indemnify JCE and hold JCE harmless from any claim, demand, loss or liability, including reasonable attorneys' fees, that results from for any loss, damage or liability arising from any acts by the Client, its agents, staff, and/or other consultants or agents that act at the direction of Client.

WORK OF OTHERS: JCE shall not be responsible or liable for any work performed or services provided by any entity other than JCE and/or any person that is not a direct employee of JCE, even if JCE coordinates with such entities for completion of the services to be provided under this Agreement. JCE does not assume responsibility for supervising, implementing or controlling the work of others.

VENUE: Any litigation initiated in connection with this Agreement shall take place in Clark County, Washington, unless such case involves a lien claim that must be litigated elsewhere as a matter of law. All claims of any nature that relate to this Agreement shall be subject to Washington state law, unless such claims relate to the foreclosure of a lien and are, as a matter of law, subject to the laws of another state.

NOTICE OF CLAIMS: Client shall provide JCE immediate written notice of any facts that could potentially result in any potential claim against JCE, including but not limited to any dispute, any claimed damages, any perceived failure by JCE, or otherwise. As a condition precedent to any recovery from JCE, Client shall give JCE written notice of any such claim or facts that could result in a claim not later than ten (10) days after the date of the occurrence of the event causing the potential claim. Client's failure to provide such notice, for any reason, shall constitute waiver of such claim.

SEVERABILITY: If any of the provisions contained in this Agreement are determined to be illegal or unenforceable, the remaining provisions of this Agreement shall not be impaired.

RATE CHANGES: JCE reserves the right to adjust rates annually as necessary to accommodate annual cost increases. Increases shall be limited to 10%.

Public Works/Community Development
407 Birch Ave SW, PO Box 810 Napavine, WA 98565
Phone: (360) 262-9344
www.cityofnapavine.com

**To:** Mayor and City Council

**From:** Bryan Morris, PW/CD Director

**RE:** Staff Report for Council Meeting, June 24, 2025

- **Planning Commission Meeting Minutes**
  - Planning Commission Regular Meeting Minutes – June 2, 2025
  - Planning Commission Public Hearing Minutes - June 2, 2025

- **Project Updates**
  - Scots Industries – Working on the upgrade of the water system. The booster station upgrade is first, and it has begun.
  - Cell tower on city property – Contract has been reviewed by both parties. Currently verifying that it meets RCO requirements and if a new CUP would be required.
  - TA Project – Per the developer, the project is expected to start back up in June or July.
  - Rush Road STIP – The Public Works Director reviewed the 60% plans and requested some changes.
  - Woodard Road (Tiger Meadows) – Public Hearing was held with the Planning Commission on June 2nd, will be presented to Council on June 24th.
  - Jefferson Station –Award letter was sent out to the low bidder (second lowest from original bid) and the city attorney is currently reviewing the contract and bonds.
  - Source Water Protection Grant - Staff met with ecology and the city consultant on May 6th, ecology provided the city with two possible options. 1. Authorize the city to utilize more water out of the existing well by upgrading pumps. 2. Drill an emergency well. Either option would provide the city with 5-10 years to find a long-term solution.

# NAPAVINE PLANNING COMMISSION MINUTES
**June 2, 2025 6:00 P.M.**
**Napavine City Hall, 407 Birch Ave SW, Napavine, WA**

**PLEDGE OF ALLEGIANCE:**

**INVOCATION:** Invocation was led by **Director Morris**.

**CALL TO ORDER:**
**Commissioner Graham** opened the regular Planning Commission meeting to order at 8:14 PM

**ROLL CALL:**
Planning Commission present: **All Present**

**APPROVAL OF AGENDA – As presented:**
**Commissioner Hollinger motioned to approve the agenda as presented, seconded by Commissioner Morris. Vote on motion 4 ayes, 0 nay.**

**APPROVAL OF MINUTES:**
**Commissioner Haberstroh motioned to approve May 19, 2025, regular meeting minutes, seconded by Commissioner Torgerson. Vote on motion 4 ayes and 0 nay.**

**CITIZENT COMMENT:**
**Paula Anderson – 266 Woodard Road –** Wanted to strongly urge all to listen to the comments of the community and is not in favor of the proposed project.
**Jeremy Johnson – Woodard Road –** Wanted to reiterate what Paula said. Completely opposed to the project.
**Marissa – City attorney** stated that the Public Hearing is closed, and no further comments need to be heard.

**NEW BUSINESS:**
1. **Tiger Meadows Development**

**Commissioner Morris** asked the City Attorney Marissa to confirm that the applicant has followed all codes and regulations that the city has put forth. Marissa confirmed yes but added that there are a lot of conditions that need to be met for this project. It is very common for designs to change before they come to the final plat, which the council must approve.
**City Attorney Marissa** requested a minor recess to confirm the correct language on the motion with the applicant's attorney and school attorney.
Meeting Continued….
**Commissioner Morris** asked the city attorney that as planning commission that they can't base any decision on personal feelings, correct? If they follow codes and regulations, there isn't anything the Planning Commission can stand in the way of? Marissa stated that it was correct.

**Commissioner Morris motioned to approve the staff report conditions subject to receiving the condition letter for school mitigation from the applicant and school district, seconded by Commissioner Haberstroh. Vote on motion 4 ayes and 0 nay.**

**Commissioner Haberstroh** added that he liked what Amy said about personal feelings. He lives down the road from 600 places that were permitted, they met all the requirements and there is nothing we could do. That's just growth, it doesn't mean it's good.

**GOOD OF THE ORDER:**
Director Morris stated that the community should be thankful this housing development was approved now at 7500 sq. ft. and not later, the state is making the lot sizes to go down to 4,000 sq. ft. Paul with Jackson Civil said that isn't

technically true, it has to do with the city's comp plan, he encouraged citizens to show up for the comprehensive plan.

**ADJOURNMENT** 8:29 pm

**Commissioner Morris** motioned to adjourn, seconded by **Commissioner Hollinger. Vote 3 ayes, 0 nay.**

*These minutes are not verbatim. If so desired, a recording of this meeting is available online at https://fccdl.in/D5zYlvz5Dm.*

**Respectfully submitted,**

Bryan Morris 6/16/25

Bryan Morris, Community Development/Public Works Director — Planning Commission Chairperson

# NAPAVINE PLANNING COMMISSION MINUTES
## June 2, 2025 6:00 P.M.
## Napavine City Hall, 407 Birch Ave SW, Napavine, WA

**CALL TO ORDER:**

**Commissioner Graham** opened the Public Hearing meeting at 6:00 PM

**ROLL CALL:**

Planning Commission present: **All Present**

**Commissioner Graham read the meeting procedures.**

**Paul Dennis with Jackson Civil provided a presentation of the project and timeline.** (begins at 1:20 mark)
As mentioned today, we have a subdivision application that's before the city and a boundary line adjustment. So we have two concurrent applications that are going on. First, the boundary line adjustment really is reconfiguring the three parcels, making the first parcel to the West, reconfiguring that so that becomes phase one of the project and the other two parcels really start to make up phase two of a of a future planned phase. It's 195 lot subdivision. What you're considering right now is phase one, which is just 56 lots. The applicant has submitted a number of studies throughout the planning process. The pre-application was held back in December of 2023. In May of 2024, they submitted their boundary Line adjustment application. And a number of documents, including a preliminary plat application in June 20th, 2024. From that a number of other studies were submitted for supplemental documents. We ended up calling the application technically complete as of August 20, 2024. And then did a Notice of Application and SEPA determination in August 2020, August 22nd, 2024. the SEPA determination was a mitigation of determination of non significance and what that means is it wasn't insignificant. The project is going to have an impact on the community. But what that's saying is the impacts that are projected from this development can be mitigated. They have the ability to mitigate, and you'll hear a lot about the impacts here during the public testimony from the school district and from the applicant. We ended that comment period September 16th, 2024. We ended up placing a hold on the project based on the agency comments. We received about 49 comments in total from the public that included eight agencies and 41 citizens at large on this project.

DAHP (Department of Archaeology and Historic Preservation) asked for a cultural resource studies to be done on site. DAHP gave the applicant the ability to do both phases one and two or just split the phases up. The applicant elected to do an archaeological study for phase one.

WDFW (Washington Department of Fish and Wildlife) and Department of Ecology (and possibly core engineers) were on site to verify the location of the wetlands and location of the stream and the buffers to see if they were appropriate and so forth. Department of Ecology asked the applicant to resubmit a site plan and identify wetland D, it was identified in the CAR (critical areas report), but not on the site plan. That is a phase two impact.

From there we accepted documentation from the school district. They had an independent third party, individual or firm that assessed what the potential impacts from this development is on the school district. But the school district conducted their own facility analysis and determined that they had a number of in-house students and that a project of this size would create additional in-house students as part of that. They looked at different capital improvements to accommodate those students and came up with their own mitigation fee. The mitigation fee was just north of $13,000 per housing unit. There's a couple of ways to mitigate the impact of the school district. You can do a senior housing project, they can still be the same product, it's just age restricted and it has a covenant. Or they can enter into a voluntary agreement with the school district and negotiate what the mitigation fee should be.

You essentially have two alternatives for this project, you can either deny the project and if you do so, you'll have to have some findings of fact of why it didn't meet merits of your own code. Or you have the ability to approve the project but with conditions. Once again, our SEPA determination was mitigated determination non significance, which means there's not a third option where you just approve the project without conditions. It's just there's enough just on the environmental side alone going on that you're going to have to have some conditions of approval and some mitigation that occurs.

Received 13 written comments (part of the record) regarding opposition of the project that had to do with utilities, transportation and schools.

**Commissioner Haberstroh** (begins at 14:38 mark)
One thing I didn't find clear was Woodard, Rd. I don't know if any as far as any improvements on Woodward Rd.

**Paul Dennis with Jackson Civil**
It was part of this staff report. They will have to do street improvements, but those street improvements will be commensurate with each phase. Also on the sewer side, they do have a planned sewer pump station upgrade that's part of their phase two development, but phase one there isn't much. Phase one is one intersection, one entrance coming through with limited street frontage. If they decide to do phase two, they will have to do other street improvements and there are some wetland impacts that will be commenced.

As part of our land use process, when you own more than one parcel and you have a large project, almost every jurisdiction in Washington state asks that they show future phases so that you can get a sense of how big the projects going to be, and what's the scope of that project.

**Parker Howell – Napavine School District Attorney** (begins at 17:00 mark)
We're here today to ask that the Commission make an important decision, which is to uphold the recommendation that was included in the staff report regarding conditions that should be placed upon this development, if it is approved, that would require the developer to either make the roughly 195 units senior housing, or in the alternative have the developer enter into a voluntary agreement which is permitted under state statute with the school district to effectively have a per unit monetary fee to fund at least some small portion of the costs that are going to be imposed upon the school district by this development. Now the facts are well established in the record, as alluded to by staff. The district did bring in a third-party consultant to describe what the temporary costs would be in terms of continuing to house students in portables. Many are already housed in portables as talked about in that report, but also to describe what the actual costs of funding permanent housing in terms of long-term capital facilities needs would be for the district even to hold in temporary facilities. We're talking several $1000 per unit would be necessary and it goes far beyond that. If we were going to actually discuss the permanent costs of potentially 10s of thousands of dollars as described in that report, now the district is not asking for that full amount.

As you're all probably aware, the city as well as the county do not have impact fees currently on the books for schools, which is an option that the district would like to impose and look into going forward with the cooperation of the city. However, state law is clear both in the SEPA statue and the subdivision statute that the city must make adequate provision for schools, and it's essentially undisputed, where I would argue it's not disputable, reasonably, that the district's existing facilities are at or near capacity in a variety of respects. And it's also not disputable that there is going to be an impact on the districts facilities by an influx in students coming from these roughly 200. There's two legal points I'm expecting that the developers attorney is likely going to talk about tonight the 1st, and I think both of those are legally incorrect.. The first is an allegation that the city's code is somehow deficient and doesn't allow you to impose reasonable measures to deal with school facilities and the impacts. That's incorrect, and I'd be happy to provide briefing to the Commission or to the city on that point, but take, for example, Napavine municipal code section 18.04.070, subsection B subsection four. That's just one example of a place where the Napavine municipal code incorporates by reference the underlying cipher statutes that define what the impacts on a school district could be, and I submit to you that that would allow you to rely on those and other portions. Additionally, there are arguments about proportionality and whether, as a constitutional matter, this would be an undue burden on this particular developer, when perhaps other developers haven't been required to pay mitigation fees. Again, I would submit to you that the district is only asking for a small portion of the actual and established costs that are either equal to or less than the proportional impact of these particular units that would be developed here. Finally, I should mention that there's an unpublished court decision in the division. Two of the Washington Court of Appeals that allows exactly and precisely the type of contingency that the staff has recommended and that the district asks you to uphold here, and that is this idea of having the developer either enter into a voluntary mitigation agreement or on in the alternative designate to senior housing.

Finally, I should mention that there's an unpublished court decision in the division two of the Washington Court of Appeals that allows exactly and precisely the type of contingency that the staff has recommended and that the district asks you to uphold here, and that is this idea of having the developer either enter into a voluntary mitigation agreement or on in the alternative.

**Parker Howell – Napavine School District Attorney** (begins at 22:10 mark)
Now finally I should mention that we have had negotiations with John Mastandrea, the developer on behalf of Enzo Holdings and with Miss De Leon, the attorney now appearing on behalf of the developer. We look forward to continuing those discussions. There's been some back and forth about what those numbers are, notably the developer reduced the amount it was willing to pay per unit after negotiations got started and we have yet to respond to that. But we believe on behalf of the district that it is reasonable for the developer to bear its fair share of the costs to make sure our students have an effective, safe and useful place in order for them to learn. So thank you. I appreciate your time.

**Commissioner Morris** – (begins at 22:53 mark)
Has the developer not offered the school anything?

**Parker Howell – Napavine School District Attorney** (begins at 23:00 mark)
Initially the developer proposed basically building a middle school building on behalf of the district. And so we proposed a formal agreement in draft that would have allowed that to occur in the district. Appreciated the developer reaching out and making that type of a proposal. Unfortunately, there's a number of legal complexities to building a school where you try to have a private developer do it on behalf of the district. And it makes it much more expensive complicated project then if you just wanted to go build the building on behalf of a private party. So as a result of that, the developer kind of made a counter proposal which was a $4500 per unit fee. The district then countered with $6000 per unit fee. And most recently, the developer countered at 4000. So we're we believe that 4000 is far short of what would be necessary to even have additional students be in portables given every portable cost about 500,000 or more could go north of that with tariffs and everything else we're facing right now.

**Commissioner Morris** – (begins at 24:05 mark)
So the school didn't want a middle school and there not happy with $4000?

**Commissioner Haberstroh** –
I think just the cost was going to be prohibited by the time you do prevailing wage and everything for the developer.

**Parker Howell – Napavine School District Attorney**
So the district again offered a formal agreement. It was many pages long that would have allowed that sort of process to happen, their developer rejected that offer and countered with $4500 per unit. The district then countered with $6000, which again is less than the known temporary or anticipated temporary costs and now in what we would in labor negotiations, call an regressive offer, the developer has gone to $4000.

**Commissioner Haberstroh** –
That payment would be required as the building permit was being pulled, or as a lump sum for the package?

**Parker Howell – Napavine School District Attorney**
The proposal that the district would have for any future negotiations would be at the time of building permit being pulled.

**Paula Sandirk – 621 Forest Napavine Road W** (begins at 26:11 mark) (Provided a letter, is part of the record)
This development of 195 homes is in the wrong place for this community. The city has just spent time and money on the new 25 year comprehensive plan. One of the land use instructions in that comprehensive plan is that to maintain the quality of life for the existing residents. Woodard road currently has about 40 families living on a farm to market road with no shoulders and minimum size of any lots there is about 3/10 of an acre with most of the residences on over an acre. 7500 square foot lots do not fit with the demographics of the rest of Woodard. In that whole thing (site plan) there is no plan for any recreation area in the development. That is next to the school grounds is totally inadequate and that the development will only add about 110 students to the district. I question that, 195 homes when that's something the state average I think is like 1.6 kids per maybe 110 kids for the first 56. The district doesn't have room for that number of added students and the development developers are really pretty reluctant to step up to the plate and do what they need to do. The development will use up about 1/3 of the sewer capacity that the city has right now. I think the sewer capacity is for like 1500 homes and there are 900 homes on it. So that leaves 600. That means 1/3 of the city's sewer capacity is gone in one fell swoop. The water situation is not that good. We did have 4 wells. Two of those wells have been shut down due to PFAS and there's not been a good way to solve that PFAS problem or to get more water. You know, most people don't water their lawns in the summer because they don't want to pay the water bills. But we do like to water our flowers and we like to water our garden. If we only have two wells and another 195 homes, then are we going to be on summer water restrictions because we don't have the capacity.

**Paula Sandirk – 621 Forest Napavine Road W** (continued)
The traffic flow study is questionable. They say that only 110 cars will leave there in the peak morning hours and they will use exit 71 to get to the freeway. I mean, it's a farm to market Road. It's about 12 foot lanes. There are no shoulders. Yes, the developers are going to build a sidewalk in front of along their front edge. But that leaves all the rest of Woodward Rd. to fend for itself. You know the financing for this proposed development is coming from Naperville, IL where 150,000 people live on 25,395 acres. The profit from this will not stay in Lewis County, but the headaches of increased demand on roadways and utilities impact all of us, it is our job to protect ourselves from the impractical encroachment of people who do not care and are only interested in the profit that they can take.

**Mark Morlan – 247-44 Woodard Road** (begins at 30:32 mark)
I own the 20 acres of land immediately east of the proposed division. My wife and I sent letters objecting to this proposal and I want to make sure that it's acknowledged that these letters are in, they contain 39 signatures that we contacted this morning in person. (confirmed received by Commissioner Graham) They are all against this subdivision and very similar to the last speaker. It's about quality of life. These units are inconsistent with the rest of the area. The area has one acre lots to five acre lots and these are 7500 square feet or something. It's we don't want them there and we don't agree with the lifestyle that it brings with it. Not to mention the financial burden that it brings. I am pretty sure that my property that is zoned for one house on five acres is not going to be worth much after this division is next to it. Because who's going to want to build a house next to this kind of subdivision? I think it's obvious the overburden that it's going to bring on traffic on sewer and water, on education and it's an overcrowding of the lifestyle. I don't think the public wants it, and I really think the public should have something to say about it.

**John Serl – 282-28 Woodard Road** (begins at 33:13 mark)
I've been a resident at 282-28 Woodward Rd. for the last 27 years. I've submitted comments for the first session recently revised, extended my comments today. I'll let the other my other set of fellow citizens talk about the quality of life issues this development could create, but my profession is a fish biologist. I've got a end of a 30 year career and I have a Master of Science degree for the University of Washington, so I want to talk about my fish concerns for Allen Creek. I believe that the SEPA document was inaccurate when it said the South fork of Allen Creek is a non-fish bearing stream. I personally observed coho salmon spawning in Allen Creek in November of 2024. As we know, lots of chemical runoff and sediment can come from paved areas. Especially this development will have a lot of paved areas. Particular chemical of concern was found in 2020 by the University of Washington is called 6 PPD quinone. It's a chemical from the breakdown of tire dust. So I would hope that any mitigation measures for the wastewater being treated, the runoff being treated from these roadways in this development would account for that chemical and be properly treated. And that your SEPA document would be revised to say this is a fish bearing stream and all appropriate mitigation buffer measures would be taken.

**Kerry Serl – 282-28 Woodard Road** (begins at 34:51 mark)
I'm sorry that this development will change the character of the neighborhood. I'm concerned about the environment, the groundwater, traffic and the schools. I also wanted to say thank you, Planning Commission. I know you're up like a volunteer group and I appreciate that you've taken your time to help us with this. I'm concerned, I understand that the first iteration that the slope of the top of the hills would be changed because right now as you're going down the road and you're cresting that hill down to the dip it's blind, you cannot see over the edge and if anyone is going too fast like they do every single day. You can't see if there's an deer or a dog,a kid, they're not going to see that. And I understand that that was going to be changed in this iteration. I would like to see it happen again that we change that slope, so that it's not a blind spot. I understand that the plan instead was to change the speed limit and I don't think changing it by 5 miles an hour is going to make a difference. So right now I think people take it at 50 miles an hour quite frequently. And if they don't change the slope, if maybe it maybe signage that says the blind spot was upcoming might be helpful. I'm hoping there's all caution taken to prevent particulates and sediment from entering Allen Creek for the sake of the coho and the Newaukum- Chehalis rivers. And it sounds like you were not going to give us steep slope variance, I hope that continues. That riparian zone is just a great wildlife area. I am a bird watcher and there's just a lot of birds and animals in that area. I am really concerned about the effective traffic right now. I can walk a mile down the street and a mile back and not pass any cars sometimes. So 200 houses worth of people is going to make a big difference. There is no alternative route out of there. There are 40 or so of us past the developments that have no other way out. Also during construction, are we going to have like half hour, one hour wait times to leave the neighborhood like they did when they were paving the road? Is there any way we can mitigate that? And then Mr. Morris was very helpful to me last week and he said there was waste from the former chicken ranch that may impact the groundwater. So since there is currently a well I've seen on that property is that well like 40-50 years old? Could there be a broken seal on that? Should we be worried

that we should have our groundwater tested for nitrates from those of us who live around that area? I don't know if you guys know, maybe we need to talk to the health department. And whatever the schools want, I'm all for that.

**Jeremy Johnson – Refused Address- Woodard Road** (begins at 38:19 mark)
I'm a lifelong resident of Woodard Road, I am hesitant to give my address since I've had members of this Planning Commission snooping down by my property on a gravel dead end road this week. So I'll leave that at that so. Anyway, so we'll leave that for another time because I understand the purpose and its meaning is to address our opposition to this project. Well, I've been up here for two years, two years I've been talking about my opposition to this project. I've mentioned everything from the traffic to the crime that it will bring to the salmon bearing stream. I've mentioned to the mayor when he first got elected, I think in his first term I remember sending him a Facebook message and he's acknowledged this about there being salmon spawning in that creek. I've watched my entire life for 30 years, I've watched the salmon come up and spawn in that river, in that Creek, and this come and spawn right up by the road. We saw thirty of them in November 24th and then in springtime I went down there and I saw a little tiny baby salmon. Video evidence, yes, I do. And so to say that it was rezoned and, oh, it was not a fish bearing stream, that is ridiculous and it's just another example of the dishonesty that has gone into this project, I feel like from this Planning Commission and from the City Council and the mayor and everybody involved in this. In no way is this project not going to affect those spawning salmon, and every time I've addressed or brought this up, planning commissions, Council, they've all danced around the issue. It's the same with the schools, everyone said it until blue in the face. I mean I've been beating this horse to death. You know the poor the middle school is the same portable buildings I was in 20 years ago. They're ramshackle, they're falling apart. And we added housing developments after housing developments already, duplexes and triplexes and everything else, it all affects the school. It all affects my kids. I have 3 kids going to that school. Got one kid going to that school and two kids getting ready to go into it and they're crowded in there enough. We got some out of town developers here that they don't give a damn about the community. They don't give a damn about our small town way of life. They don't give a damn that we've been down there for years and years. We bought those places for a reason. We're down there for the peace and quiet. And I know Bryan said before. Oh, well, if you want to have a place like that, you got to go out to Curtis. No, that's not the case. That's not the case. My dad's built everything on our property with his own two hands as our homestead down there. I've been laughed at and mocked when I said that before. But it's a fact and you know I've been coming up here for two years, I've got nothing but disrespect, passive aggressiveness. And I've been given complete run around and everybody just wants to point fingers. It's totally ridiculous. So I've put in letter after letter. I've been coming up here for two years. I'm going to say it again. For the record, we are opposed to this development. It is a safety concern. The road is not wide enough. 2 trucks cannot pass along that road. If you have a trailer behind you or if there's a garbage can on the side of the road, you are hard pressed not to clip them mirrors of the truck going next to you. Theres no amount of sidewalks or road widening that is going to fix that. Not to mention trying to get out of there at 8:00 in the morning when everyone's trying to go to school. Everyone's trying to go to work and you're sitting there with a one lane road in and out trying to get all these people to come in and out. They're going to be backed all the way up to my place, at the end of the road. It's not the right place for it. We've said it time and time again. The public doesn't want it, but this Planning Commission, the City Council and everybody that I've had interactions with around here do not seem to give a damn, and that's been my take away and I'm extremely frustrated. I'm extremely aggravated. This is my home. This is where I'm trying to raise my children and I get laughed at, mocked, ridiculed, spied on.

**Commissioner Haberstroh –** (begins at 42:58 mark)
Could I interject one minute with due respect? I'm appalled that you're saying everybody up here. OK. I've went out of my way to be nice to you. OK. I'm not perfect, but I think the people up here are donating their time. If someone you have a beef with do not generalize to everybody. If you got photos, I would recommend they get there. I'm not saying there is, or there isn't. But if there's proof we need the proof of the fish and stuff. I think that's important. *(Executive Assistant Katie Williams stated that John Serl has pictures of the fish included with his letter)* Need to get together whether we're local, or not local, we need to all get behind and support bonds for this school.

**Jeremy Johnson – Refused Address- Woodard Road**
And I will say for the record Arnold that I have had good interactions with you, and I have never had interactions with you. For the record.

**Dan Mikota – 194-20 Woodard Road** (begins at 44:39 mark)

Found out about the meeting because the neighbors that are within 300 feet of the property. My folks also own the property that's 100% of the north boundary of this property, so we've got naturally some concerns on what goes on next door regards to the fish. My grandfather, if he was alive, could tell you stories of picking salmon out of the creek with a pitchfork. And on my phone there's a video of my driveway, so I'm above Woodward Rd. by two properties and we had a couple dozen fish make it this year. It was great year for the coho. I can say as my childhood memories we went out picked them up, took picture and then put them back. So they've always been there and they're doing well. In fact Napavine school science class has been releasing coho salmon into that creek, except for the last couple of years because the tank failed, so they lost the batch. So there is definitely fish there and the Fish and Wildlife came to my house this year, asked permission, walked the creek, did their documentation whatnot so.

I'm on the school board, we all want a middle school. The concern is it's a big promise. When we went out to bid for the middle school, I think it was like $8 million. The proposed construction was about $600,000 or something. It was in the hundreds of thousands, nowhere near that so. The loopholes to get there, there's a lot of insecurities around that. The board wanted some assurance that if this goes sideways and we have a foundation and nothing more, how do we finish? We want it bonded for what it takes for us to finish it. And that's where this conversation turns a little bit that that's a big ask and we understand that, but we don't want a halfway done project with undue burden then on the school to come up with additional money that we don't have and bonds that we can't pass. Because even those that support don't always vote yes because they can't afford even if they do support. So we just don't have that. And without high dollar homes in the area, we're not going to bring affluent people to the area that want large lots and whatnot is kind of the feel for what might bring that.

Mikota shared a video on his phone of the fish at his home that was taken November 2024.

**Paula Anderson – 266 Woodard Road** (begins at 47:44 mark)

I think that it's natural for Napavine to want to grow our community. If you have a nice community, the community wants to grow and people want to live there. As a parent with children in schools one of the reasons that we moved to this community was for good schools and a good quality of life for our children. And I think that people coming to our area would want the same thing. And so if you look at some of the other school districts in the state of Washington, some areas that have had tremendous growth have really great school districts. And that's the key is a parent. What we're looking for is a really great school for our kids. And when you have a good school, then you can have a good community and then you bring people in looking specifically for a good school district. So if we're building family homes and we're wanting to grow our community, I think we should be growing our school. Let's put the horse in front of the cart and not the cart in front of the horse. We don't build the homes, we need to build the school because the second we have a great school, just like Camas Washington, they will all come to us. So, I think with this development, we're not necessarily looking at building our community we're just building a housing or a subdivision. So, what if we look at building our community? I know Chehalis just put in housing development off of Rush road, and one of the things that they did in that development is they actually set some lots aside for community spaces. So they have a park area, they have other things like that to build community. I have no problem with growth. I don't necessarily want 195 houses right across the street from me. I don't think it fits with the Woodard Road area. But I think as a community, if we are going to grow and build money for our Community, just like the previous speaker said, we want really nice houses and a wonderful school because when we have those things, the people will come. So, I just want to say thank you very much for opening this up for public comment so that we could come and talk about that.

**Ron Johnson – Woodard Road** (begins at 49:55 mark)

Yeah, I'd just like to repeat a little bit about the Allen Creek and the salmon run. It's a real thing and it is not a drainage corridor as it's been called. It is a real salmon bearing creek. You guys can do whatever you want and dig whatever ponds and retention ponds from this pond to that pond you want. But that water is only going to sit in them ponds until the pond gets full and then it's going to run right over the top and out of the pond. It's going to do nothing just like this pond that's down here at the Stadium Heights, it holds mosquito water all summer long. OK, the ground doesn't suck up the water. It goes in the pond. When you got a bucket, it's full of water. You put a cup in, cup comes out. There's only one corridor right now, it's a creek. And that's Allen creek. It's not a drainage corridor and all that water coming off them 195 houses up there is going to hit that creek. It's just going to destroy the creek. And I'm kind of confused right now because Fish and Wildlife is doing an investigation on that Newaukum river, there's a $75 million grant, I believe, to restore the new Newaukum River,

**Ron Johnson – Woodard Road** (continued)
and that's about to begin. And I would think that if Fish and Wildlife was really concerned about restoring the salmon runs like what was in the article in the Daily Chronicle the other day, a couple weeks ago. They would be concerned about the creeks, the tributaries to the river because the salmon don't spawn in the direct river. They go up to the creeks and the creeks are all destroyed. They're destroyed by beavers, they're destroyed by all kinds of things. When we lose 1 little creek, that's just one other tributary that's feeding. That's salmon back into the Newaukum river, so I hope the Fish and Wildlife does their job and they figure that one out because there's a lot of salmon trying to spawn up that thing. And that Creek is a mess. It's all plugged up and and and it can't drain properly. The Beavers, since we've not been allowed to trap them. Not just destroy all these crooks around if you don't believe it. Look at the Dillenbaugh Creek. I can show you the whole thing. Beaver dams everywhere. There's only one way down that hill for that stormwater, and that's Allen Creek, not another drainage corridor. I rest my case.

**Aaron Anderson – 266 Woodard Road** (begins at 53:07 mark)
Was wondering if his address was going to change. He thought this project was moving the city limit lines, got this project mixed up with another project.

**Jeremy Johnson –Woodard Road** (begins at 55:00 mark)
How is it not a conflict of interest to have the wife of the head of the Planning Commission on the Planning Board?

**Commissioner Haberstroh –** (begins at 55:10 mark)
I would think that probably needs to be taken up with the City Council, that has nothing to do with us.

**Jeannie Johnson – 282-23 Woodard Road** (begins at 55:23 mark)
I don't have a prepared statement, but I do want to just say that growth is inevitable. It's going to happen and you can't stop it. But I really don't think that Woodard Road is the right place, the road is narrow. We live in a community of people I feel like I can say for everyone that we like how it is. We like our road and we like the peace and quiet and we enjoy the birds and the deer are going through. We really, really like that and like to keep it that way. But like I said, you can't stop growth, but if there was another spot, we'd be happy to shove them over to somebody else.

**Kelsey Graves – 277 Woodard Road** (begins at 56:29 mark)
I've lived there about 17 years and raised my 8 kids there and we have thoroughly enjoyed it because of the space that is there and the ability to go on walks and feel safe. We previously had permission to walk that property, we call it the chicken farm, so all of our kids have enjoyed spending time out in nature and the gift that it is. But beyond the personal joy of it and just the livelihood that we enjoy there. I am very concerned about the traffic and safety issue that it's going to bring. I still have a young daughter with a disability, and I have grandkids that live on that road now too. I also am concerned, as everyone else for the school and just the impact that it's going to have on our town alone. It doesn't seem like just our town can handle that much traffic. And the backup that we already have a little bit of on Rush Rd. exit there, so thank you for hearing our concerns and allowing us to speak and hopefully we can make something work that will benefit everyone.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 58:43 mark)
Because I think as you heard from staff presentation, this is about phase one. This is the preliminary plat for phase one, which as stated in the proposal, it's 56 homes. It is true that there is a vision for the full build out of 195 lots for the full phase one and phase two. But what's before you tonight is Phase 1. Again, this project has gone through very detailed review as you saw from the outset, there was a timeline that staff presented where we've been at this for about two years now. As you've heard numerous, you know, staff reports, agency reports, numerous agencies have been involved. We heard members from the public talk about Fish and Wildlife. They've been involved, also Department of Ecology. This has gone through a pretty exhaustive review at this point. I have with me at this table are one of our experts who's the project engineer. He'll speak to a lot of the issues. We also have our wetland biologist as well as our traffic engineer here too. So we'll be talking a lot of these issues and do our best to answer the questions from the community. I encourage you all to get involved in the Comprehensive plan because that is the root policy document that then leads to all of the development standards that guide growth. And this project, our sole question that we have here today is does this project comply with the code and the applicable regulations. It's not about is it appropriate given you know trajectory of. This Planning Commission, the Community, have already answered that question in the comprehensive plan. So I just wanted to clarify that just to provide that introductory, because I do think it's really important to frame the conversation.

**The Q & A between the applicant's attorney and experts are simplified, the recording is more detailed and verbatim. She provided the experts resumes to the Planning Commission (part of the record.)**

**Andrew Harris – Project Engineer – Momentum Civil** (begins at 1:04:53 mark)
He is the principal engineer from momentum civil and is the project engineer for this plat. Himself and staff under his direction prepared the documents presented for roads, utilities, proposed lot lines, buffer, and road widening on Woodard Road. I've He has been a professional engineer for 17 going on 18 years. He's worked on many master plan communities. Many plats of this size and many street and utility improvement projects.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:06:43 mark)
Asked questions for clarification below to Andrew Harris.

1) Does the project documents refer to stream one. Could he clarify the issue of stream 1 Allen Creek and whether it has been categorized as fish bearing?
2) Please describe the stormwater system.
3) Are there currently any pesticides on the property that you know of? Any stormwater treatment on the property currently? So would all the stormwater in the future is actually being collected and then treated before being discharged into the stream, is that a net positive?
4) Can you describe what the actual build out on Woodard Road looks like for this project?
5) We did hear from Miss Serl, she had a question regarding the curvature of the road, and I just wanted to clarify, does this issue pertain to the scope of the project for phase 2 as opposed to phase one?

**Andrew Harris – Project Engineer – Momentum Civil** (begins at 1:06:49 mark)
Response to questions above.

1) He stated in the SEPA documents and in the critical areas report stream 1 is Allen Creek and that is described as a Type F fish bearing stream as shown on all the documents by the Department of Natural Resources, the fact that it is fish bearing has not been disputed and the standard buffer of 150 feet is what was held as the basis of the project design. There is provisions in the Code of the City of Napavine for a reduction in the buffer with mitigation, and that mitigation has been added to the plans and a 110 foot buffer is what is shown on the preliminary plat.
2) The field is currently a grass field, and the Department of Ecology has requirements that when we go about a project like this where we actually, unless we can prove that it has always been grass and that it was historically a Prairie, which we cannot, we are supposed to model it as if it is a forest, a mature forest. And the existing condition of a mature forest will form the basis of our runoff file that we need to provide out of the pond. So the model that has been run mathematically using the Western Washington hydrology model, which models rainfall for decades. This has been run through the pond file and what it shows is that we were able to capture all stormwater from this development, including its roads and roof surfaces, capture them in a pond and then treat that stormwater prior to its outfall to Allen Creek. So the treatment standards are the basic water quality treatment standards, which are required for residential properties. That is what we are following and what is proposed.
3) Yes, that could be said.
4) So at this time, what's proposed for Phase 1 is a street improvement that looks like a sidewalk along the north side of Woodward Rd For the length of the project and improvement, and then running West all the way to connect to existing sidewalk, so it will have safe pedestrian connectivity along Woodard Road from phase one westward into town and to school. And then in addition, the road will be widened northward for the project frontage, so that that lane from center line N to the curb line will be 17 feet plus the width of the gutter pan so you end up with 18 feet plus the existing S lane on Woodward Rd.
5) During the sight distance analysis for Phase 2, sight distance deficiency was identified along the horizontal curve. That is a phase 2 issue.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:14:18 mark)
Provided a resume to the Planning Commission for Aaron Van Aken, Traffic Engineer for the project.

1) Please describe your role with the project.
2) Can you briefly describe your education and professional credentials?

3) Did your traffic impact analysis cover both phase 1 and phase 2? But we are just talking about phase 1 right now, correct? Can you discuss fundamentally what the level of service standard means?
4) What is the level of service standard again for the city and Washington state? Based on all of the data you collected, will the project fall under and meet the level of service D?
5) Did you also evaluate whether additional mitigation like left turn lanes or anything like that would be warranted by the amount of traffic generated by the project and what was the conclusion?
6) And I just want to be really clear here, this is scientific. These are these are numbers, there's not a whole lot of discretion that you have here. This is you collect information, you collect the data, you run it through the models and the numbers are what the numbers are.
7) So based on your traffic impact analysis, does it conclude that particularly for phase one, the project does not generate significant impacts, meriting additional mitigation? And does it comply with all level of service standards, and any other standards?

**Aaron Van Aken – Applicant's Traffic Engineer – Heath & Associates** (begins at 1:14:18 mark)

1) I'm a licensed engineer in the state of Washington, and I'm a principal engineer at Heath traffic. We conducted the traffic impact analysis for this project, and I was the the lead engineer on the project.
2) I've got an engineering license and a degree, and I've been a principal at the firm for about 10 years now and total about 13 years of experience.
3) Yes, So level of service is a metric that we use in traffic engineering and it is a measure of the roadways, capacity and efficiency and it's graded like a report card that goes A through F where A is basically you go up to an intersection, you experience no delay where F is extreme congestion, where you don't get through a signal on the first cycle. And so that would be over saturated or what's considered a failure. And so the city of Napavine as well as WSDOT have a level of service D standard, which means in the peak hour, which is typically defined between 3:00 and 6:00 PM, you're looking at the busiest hour of the day and you're measuring that level of service. And once it exceeds D, so where if it goes to an E or an F then you start looking at mitigation or improvements to fix that deficiency.
4) D – D as in dog. Yes, It does, and that's in aggregate. We didn't break out phase one independently, so yes.
5) We did, the conclusion we looked at left turn lanes at Woodward Rd at the site access along with the main intersection at Washington and Woodard Road, and both of those did not meet the minimum thresholds, as set by the WSDOT warrant nomograph, and that's all documented in the report.
6) Correct, and the turn lane as a threshold based on the arrival rate, and it's just a clear line, if you exceed it or you don't exceed it. So it's pretty cut and dry.
7) Yes, it does.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:20:17 mark)
Introduced Timothy Haderly, the wetland biologist and provided the Planning Commission his resume.

1) Please state your name for the record, and briefly give the Planning Commission just a summary background regarding your education, your credentials?
2) You said you're the project biologist, can you just describe what that entails for this project?
3) And is it your understanding that a critical areas report was prepared for this project? And can you explain what is a critical areas report?
4) And is it safe to say that it is prepared by and typically by an experienced biologist or scientist? Is it performed in a scientific manner?
5) Did you by chance have any interactions with any state agencies in connection with this project?
6) Are there any wetlands located within phase one?
7) In this case, is Stream 1 the same stream that we've heard being referred to as Allen? Is that identified in all documentation as a fish bearing stream? And that is known as a type F stream?
8) How does the code address the fact that it's a type F stream and that there is a need to protect the type F stream?
9) So the code therefore requires a create area of protection, meaning a more significant buffer?
10) You mentioned mitigation measures, referred to as enhancements. What are those in regard to this development?
11) So the enhancement work you just discussed, you said there will be, is it right that there will be restoration of native plantings and other ecological functions that will improve the wetland?

12) Is it accurate that Fish and Wildlife is very much aware of this project and has been involved?

**Timothy J. Haderly – Applicant's Wetland Biologist –** (begins at 1:20:17 mark)

1) Timothy Haderly, I am the project biologist. My degrees are in terrestrial biology, chemistry and freshwater studies, and I've been consulting for approximately 36 years.
2) For this project, I was tasked to evaluate critical areas, including wetlands and streams, evaluating potential impacts. If there were impacts, developing a mitigation plan to mitigate for those impacts.
3) Yes it was. Critical Areas Report is basically a document that outlines everything that's on the site according to city code and it includes wetlands, streams, any other potential habits or species that could be of concern.
4) Yes, it's required to be prepared by somebody that has the qualifications. Yes, I did not do the critical areas report on this project. It was done by a previous consultant, but I reviewed it and I agree with the report.
5) Yes, I had e-mail correspondence, telephone, and I walked the project site with both Fish and Wildlife, and Ecology. The end result was they agreed with the critical areas report the project as designed and a proposed mitigation.
6) Yes, there is a corridor wetland associated with the fish bearing stream. That is identified on the plans as Wetland A, the fish bearing stream is identified as Stream 1.
7) Yes. it's definitely a tributary of the Allen Creek watershed. Yes, it is identified as a Type F, fish bearing stream.
8) Typically, the codes the the higher quality of stream gets a wider buffer. So if it's a seasonal stream with no fish buffers are typically smaller in width.
9) Yes, that's correct. The buffer is typically 150 ft, but the buffer being provided is 110 ft. With exceptions, the 110 feet says that you have to mitigate for the impacts to reduce the buffer. We have a unique situation here. We have both a fish bearing stream and a wetland one in the same, so you always use the most extreme buffer associated
10) Providing enhancement of areas that are now grass field, we will be planting trees and shrubs so the pink areas are actually areas that are going to be wider than the 110 foot buffer and in some areas they're actually greater than 200 feet. So we're actually going above and beyond the 150 ft.
11) Yes that is correct.
12) Yes, very much. I walked the site with the Fish and Wildlife Staff member and we agreed that this stream is a fish bearing stream has fish in it and needs to be protected.

**Bryan Morris – Director of Public Works/ Community Development** (1:30:42 mark)
Asked Mr. Haderly if the cities wetland code has been reviewed and adopted by Department of Ecology?

**Mr. Haderly** stated yes all city codes with respect to critical areas are reviewed and approved through ecology and other agencies through a process.

**Dan Mikota** (1:31:26 mark) – Raised the fish concern with the pumped sewer laterals that will be included in phase 1. Also the sight distance was an additional concern.

**Ron Johnson** – Wanted to know the treatment of stormwater. And what percentage would you say that it purifies the water?

**Drew Harris** (1:34:04 mark)- State of Washington Department of Ecology has a process. It's called the tape process and it's quite rigorous. And in order for a stormwater treatment device to be approved under that process, it needs to be tested and tested and tested again, and the place that they do that is under the bridge in downtown Seattle, where it's testing highway runoff from Interstate I-5. That's the tape process for stormwater quality treatment and when devices are being developed, they get run through the process where the influent and the effluent are measured and the efficacy of the treatment is able to be shown through a study. So for this development, we propose to use not only a detention pond which does allow for sedimentation to occur as the water goes in and sits, it settles. You have a lowering of total suspended solids during that process, but then subsequent to that it will be run through a filter system and those filters normally include a combination of sand media, granular activated carbon and other mechanisms that reduce the load of pollutants. Significantly, that would be going into the creek. The percentage depends on the type of pollutant. There's different types of parameters of concern that are measured

and zinc is one of the pollutants total suspended solids, turbidity. These are the types of pollutants and the percentages are normally in the 90 to 95 percentage, but it depends on the parameter of concern.

(In regard to Dan Mikota's question above) The sewer lift station is required to be able to pump sewer effluent from this development, either from phase 1, or phase 2 the sewer cannot be extended through gravity to feed this development, so it will be installed under phase one. But the grading around that will be specific just to the lift station pad area and that's shown in the phase 1 documents so that the whole road will not be widened at that time, but the lift station pad will be constructed and all the lots in phase 1 will have sewer that will drain and then a pumped main will go connect to the existing city sewer.

We have stated on the documents that further study of road curvature and mitigation if required, will occur under final engineering design and that's noted under the preliminary plat documents. It's common that these items are figured out during the engineering design phase, not at the preliminary plat phase.

**Kelsey Graves – 277 Woodard Road** (1:40:40 mark) Stated that D is not a good grade for a traffic report. It may be passable, but not something that she would be excited about for the town.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:41:37 mark) Spoke regarding the school capacity issues.

I first want to acknowledge not only to the school district, which I think has been acknowledged by the applicant, but also to the public, that we fully are aware and understand that school district has been experiencing overcrowding and needs funding to address these existing deficiencies. There are several methods and options to address this issue. I think the Commissioner's comment is very well taken that one option is for the Community to get really behind the school district and go forward with the bond and to own that issue and really get to the heart of the funding problem. I understand that that's been proposed and unfortunately it has not passed. So that's one of the reasons why unfortunately the community is experiencing this issue at a more local level. It's also been mentioned that the city could adopt a formal impact fee. But again, that also has not been successful. And again that's one option for the city to consider. The Council for the school district mentioned SEPA and exercising the city's jurisdiction, their substantive authority under SEPA to impose SEPA conditions. Before you, you have what I believe is exhibit 28 and I'll get into this a bit more in this circumstance and I stand by and I know the unpublished case that Council referenced. The city unfortunately does not have the ability to exercise sepa authority in this situation because there's not a stated policy adopted in code. The code that was referenced by counsel is a very general reference to resources. The case that is referred to by Council again, it's unpublished and it does not actually address the issue of whether a broad policy regarding resources actually captures school funding under the environment. If you look at the WAC, the Washington Administrative Code, specifically one 197-11-444 that specifically delineates the elements of the environment, there is a definition for resources. And then there's a separate definition for public services. Resources are things like energy, physical resources. Public services includes school funding and things like that. The city's code references resources, it does not reference school funding or other public services. So again. And I would argue, and you know, unfortunately we might have to argue at a litigation level that unfortunately the city just doesn't have the ability to exercise that SEPA authority in this instance. All of that being said, we do acknowledge that this problem exists and the applicant does want to be a good community partner here. You heard Council talk about that there was a negotiation, there was willingness by the applicant to build a middle school building, again ongoing negotiations about numbers and things like that. Hit a curveball when this report was produced by OAC. I assume you know at some point, if you haven't already, that the Commissioners will read that report. And fundamentally, the critical problem with the report is it analyzes, it assumes impacts from 195 lots and from on that basis it goes into all sorts of calculations based on overcrowding and various, you know, data points that the school district is putting forward. We don't have a project before you for 195 lots. We have a project before you for 56 lots. Again, the calculations, the cost estimates, all of the overcrowding data, it's based on an assumption that we are going to build 195 lots. Your scope, your authority right now is to condition the project for 56 lots. OK, reading the OAC report and even the supplemental report. And again, I'm a lawyer. I don't dabble in numbers purposely because that was not my calling in life. However, my read of the OAC report are there are two categories of overcapacity concepts here. There is in section 3.1 in enrollment capacity issue where they identify that the high schools over capacity by 59 students, they also acknowledge that the elementary school still has capacity. Then the report gets into what I'm going to call physical capacity issue and in that context they say that the school district is over capacity by 110 students at junior and high school level on that basis, they used the 110 student capacity over capacity issue to generate that calculation. Again a calculation based on 195 lots, not 56 lots, 195 lots. Then the consultant submitted a supplemental report, I think tried to explain this difference in overcapacity data and bridged the gap there. That supplemental report explained that the 59 student enrollment over capacity number it's based on that lower number it's based on objective third

party data from the office of Superintendent Public Instruction and it's based on information that doesn't actually reflect how the school district puts children in classrooms and how they organize their classrooms and things like that. That's how that 59 over capacity numbers reach. The 110 over capacity number is, however, based on the data provided by the school and those real world internal decisions about where they place children in classrooms. There's a delta there. I don't know how to really bridge that delta, but it seems to imply to me that to some degree there are decisions that are being made by the school district that result in children being placed in over private classrooms to a degree, to a degree, I don't understand why a third party, you know, state sponsored institution would come up with a lower capacity number. Again, we fully acknowledge that there are impacts, but the report at least calls into question what the calculation should be. And it calls into question the fact that it severely overestimates, if not more than doubles the amount of impacts, because it's based on 195 lot buildup as opposed to the much more limited project that's before you, which is for 56 lots. So with all of that, again acknowledging that the applicant does want to be a good community partner, we are, you know, still trying to find a solution here. We acknowledge that staff drafted a condition regarding that voluntary agreement. We understand that that effort was, you know, to try and bring the parties together and I'm going to say candidly kind of push the issue back to the school district and the applicant to figure it out. We understand the rationale behind that. The problem is, is that there's a basic tenant in permitting and land use law that conditions have to be implementable, they have to be achievable. That condition as drafted that we just have to go and try and get a voluntary agreement is fundamentally, unfortunately flawed because we have no way of guaranteeing that we can reach an agreement with the school district. So that condition is a huge legal risk and problem. That's why we drafted the condition that we sent to you last week, I assume in your packeting your record for the $4000. It's a straightforward condition. It's a significant amount of money. There's certainty there. It provides for the impacts from the actual 56 lot development that's before you. And we think it's an honest and good fair proposal. So with that, we respectfully request that you do advance this proposal that you adopt staffs recommendation for the most part with that revised condition and we request that you advance this to Council.

**Parker Howell – Napavine School District Attorney** (begins at 1:50:47 mark)
Again, there are a number of factual and legal arguments that I wanted to address that the developers attorney has raised. First of all, this school district hasn't received a copy of a proposed amendment to the staff report or the conditions that would impose a $4000 per unit fee. (Provided the letter to him at that moment) The district would certainly be in favor of the Commission imposing a per unit fee. You know, without negotiations, in which case we'd ask that you impose the $6000 fee that we had proposed in negotiations. I have now received a copy, which I'll briefly read over here. To the extent that the developer through this submission, is admitting that there's authority of the Commission to impose a per unit fee, we would suggest that a $6000 fee is more appropriate. It's still less than the over $7000 that's calculated per unit based on what OAC did in its third party analysis. And even that 7000 is based on the cost of temporary, temporary facilities, in other words, putting continuing to put students of the Napavine community into portable buildings, rather than having a long term solution of a new middle school or whatever the necessary facilities would be. Now Council for the developer would have you believe that the solution is a magic bullet of passing a bond. We all know what bond passage rates are in state of Washington, but that argument dodges the key point and the key point is under state law, both SEPA and the subdivision statute, it's incumbent upon the city as a legal duty to provide for what is in the state constitution. The paramount duty of this state, which is adequate schooling, which is facilities in this case. Developers, as they develop, owe to the community they're responsible proportionate share. The developer has further tried to cloud the issue about the OAC report and say it's uncertain what the quote delta is between what OSPI, the state agency overseeing public education, says should be the number of students that you have for facility planning purposes versus the number of students, suggesting that there's mismanagement somehow by the school district that's resulting in Overcrowd. Members of the Commission that is simply not the case. OSPIO, the state agency that oversees education uses that number that was first referenced by council for purposes of how much money they're going to give school districts and state construction assistance programming, or SCAP funding. So it's a rote formula that doesn't deal in everyday realities. But rather comes into play when the state is trying to figure out if you're generally going to house X number of students, how much square footage and how much cost is that going to entail. The higher number, the roughly 110 that Council referenced and admitted is in the report. On the other hand, is based on real world, on the ground reality, and that is that there's a large number of students who have to be housed in portables. Council also attempted to call into question how many students are going to be generated by this development, saying that it's inappropriate to base this on 195 units when this is phase one for 56 Units. Earlier in her presentation, Council, though, admitted that it is appropriate in the SEPA context to look at the total impacts of the entire development, which is what this report has done. Further, there is no reason to distinguish between the 195 units and the 56 units in terms of what that per student impact is going to be. Every additional student is generated when the facilities are for all intents and purposes, full, is going to generate an impact. Further, we're not asking the Commission to impose the more than $20,000 per unit it would cost likely to actually house these students on a

permanent full-time basis going forward. We're just asking for the roughly less than the 7000 that's actually needed on a temp basis. We're asking for the 6000. Now going to the issue of the code, there is case law that exists that discusses the fact that even references that are somewhat oblique and incorporations by reference of the SEPA policy into Napavine Municipal code are sufficient. The fact that the case in Division 2 is unpublished doesn't change the fact that at least one court has looked at the method that was proposed by staff and said that that was a lawful method, that being the senior housing or reaching a voluntary agreement. And it's certainly not impossible for the parties to reach agreement. That said, it would be much simpler again, with the understanding if the developer believes that this Commission has that authority, the right thing to do here would be to impose the $6000 per unit fee, and that's what we asked you to do today to make sure that all of the students of this community have an adequate place to study and learn.

**Commissioner Morris** – (1:56:22) - Asked if the school is overcrowded now?

**Parker Howell – Napavine School District Attorney** (begins at 1:56:31 mark)
So according to OSPI SCAP school Construction Assistance program, formulas have to do with the money that the state sends. If you pass a bond, for example they would say that the elementary school has capacity, but not at the high school. In reality, the issue is that there are dozens of students every day, largely at the middle school, from remembering the report correctly, who are learning in portables. No school district in the state of Washington considers having students in portables as permanent housing. So in that sense, there is overcrowding as it exists currently. The district also uses, as most places do, a formula to figure out how many students can be assigned any classroom. There are collective bargaining agreements with the teachers union that dictate that as there are in most school districts, and so if even if the district said somehow fire code would permit us to 50 or 60 students per classroom. The teachers agreement wouldn't allow that. So yes, the districts facilities are full as it stands currently, and it's incumbent on this particular developer to not pay for everything but pay for its fair share of the facilities that are needed. We're just asking on a temporary basis. even with more portables.

**Commissioner Morris** – (1:57:51) – How many out of district students are actually in Napavine now?

**Parker Howell – Napavine School District Attorney**
Referred that question to Mr. Schutz, he stated 92 out of district coming in, but have 136 students that are going out to other districts.

**Director Morris** – (1:57:51) – Stated that he's all for the schools and is it fair to say that you cannot split a SEPA? And that the law says that the city will give consideration to the school, and does it not say at an adequate level? Who makes up the definition of adequate and consideration?

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:41:37 mark)
Stated it is true, that and that's what we were reflected here that under SEPA, but you are not supposed to or allowed to piece meal environmental review, which is why the phase 1 and Phase 2, all that information was provided so to the extent that phase 2 does proceed, which again don't know but to the extent it does proceed, those environmental impacts have at least been flagged under the SEPA authority.

**Paul - Jackson Civil -** What you do here under phase one from a land use standpoint, when you do hear from a phase one standpoint sets the stage for how we approach Phase 2.

**Nicole De Leon – Applicant's Attorney – CairnCross&Hempelmann Attorney at Law** (begins at 1:41:37 mark)
But under a fundamental, you know, just permitting perspective, the only thing that's before you is phase 1. So the only conditions that can be attached are with respect to phase 1.

**Commissioner Haberstroh** – It's not my call on y'all's negotiation, but I think that's something that you guys aren't too far off ought to be able to come up with some type of solution there.

**Nicole De Leon – Applicant's Attorney –** Requested a 5 minute recess at 8:01 pm.

**Meeting resumed at 8:09pm**

**Nicole De Leon – Applicant's Attorney –** (begins at 2:09:08 mark)

For the record, this is Nicole DeLeon, the land use attorney for the applicant. After conferring with the school district and council for the District, I have some good news, which is that we have reached a specific condition and amount. It is a version of what was submitted to you with some modification. I'm going to read it aloud into the record and then I think Council and I can ultimately submit a co-authored letter or e-mail with the formal language, but I'll at least read it to you just so that you're aware of the verbiage that's been mutually agreed upon. And so if you're referring to the letter that we submitted last week, that would be revised to read. The applicant shall pay a voluntary school mitigation fee of $6000 per dwelling unit with payment required prior to issuance of each individual building permit and paid to the Napavine School District in consideration for school impacts from phase 1 and phase 2. The school district in council and the applicant have agreed to that voluntary mitigation condition. We think that satisfies the school districts concerns regarding impacts to schools from this project on the grand scale. And again, we'll provide that language so that hopefully the Planning Commission can incorporate that into its recommendation to council. So thank you for the nudge and I think we got to the finish line on that particular issue. That concludes our presentation.

Discussion continued on how to provide the recommendation to council between city consultant, Planning Commission, and city attorney.

**ADJOURNMENT** 8:12 pm

**Commissioner Graham closed the public hearing at 8:12 pm.**

*These minutes are not verbatim. If so desired, a recording of this meeting is available online at https://fccdl.in/D5zYIvz5Dm.*

**Respectfully submitted,**

Bryan Morris, Community Development/Public Works Director

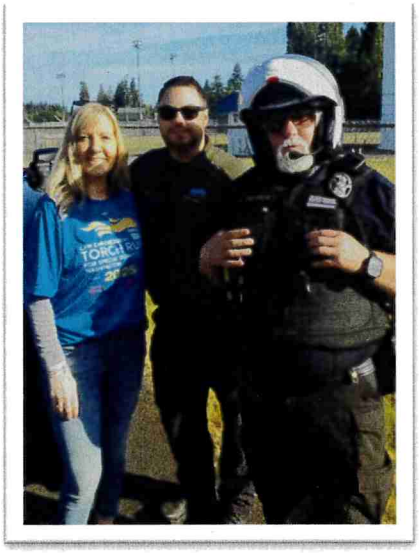
Deborah L Graham 6/16/25

Planning Commission Chairperson

# *NAPAVINE POLICE DEPARTMENT*

## COUNCIL 6/24/25
## STAFF REPORT

- The monthly call totals for May are included in your packet.
- Our department made an appearance at a party for a local juvenile that shows great interest in law enforcement. He has multiple uniforms and issues "citations" at his church. (Pictures below)
- The annual Law Enforcement Special Olympics Torch Run had its kick-off here at City Hall on June 10th. It was great to see everyone involved in this event and lead them through town to Bethel Church. (Pictures Below)

# Napavine Police Department
## Monthly Call Activity Report

| # | Type of Call |
|---|---|
| | Abandoned/Disabled Vehicles |
| 1 | Accidents |
| 7 | Agency/Dept. Assists |
| 2 | Alarms |
| 3 | Animals |
| | Arson |
| | Assault Offenses |
| 5 | ATC (Attempt to Contact) |
| | ATL (Attempt to Locate) |
| | Bad Checks |
| 1 | Burglary |
| | Child Abuse/Neglect |
| | Child Molestation/Rape/Comm |
| 4 | Civil/Public |
| | Death Investigations |
| 1 | Disorderly Conduct |
| 1 | Disputes |
| 4 | Drugs/Paraphernilia Violations |
| | DUI |
| | Eluding |
| | Fire Call |
| | Firearms |
| | Fireworks |
| | Forgery |
| 1 | Fraud/Scam/Counterfeit/Ident Theft |
| 1 | Harrassment |
| | Homicide |
| | Illegal Burn |
| 11 | Information/General |
| 1 | Juvenile |
| | Kidnapping/Abduction |
| | Littering |
| | Lost/Missing/Found Persons |

| # | Type of Call |
|---|---|
| 2 | Malicious Mischief |
| 1 | MIP/Furninshing Liquor Mino |
| | Noise |
| | Overdose |
| 1 | Property/Lost/Found/Recovered |
| | Rescue-Minor/Major |
| | Robbery |
| 1 | Runaway |
| | Sex Offenses/Pornography |
| | Shoplifting |
| | Suicide/Threats/Attempts |
| | Shooting/Weapons/Explosives/Hazard |
| 2 | Suspicious Circumstances |
| 5 | Suspicious Person/Vehicle |
| 9 | Traffic - Criminal |
| 38 | Traffic - Infractions |
| 8 | Traffic - Other/Hazards/Patrol |
| | Tresspassing |
| 2 | Thefts/Larceny |
| | Thefts (Motor Vehicle)/tmvwp/recstveh |
| | Vandalism |
| | Vehicular Assault |
| | Vehicle Prowl |
| 1 | Violation City Ordinance/Nuisance |
| 3 | Violation of Protection/Harrass Ord |
| 2 | Warrants/Wanted Person |
| | Welfare Checks |
| 1 | 911 Hang Up |
| | Hit & Run Accident |
| | Security Check- Business/Residential |
| | Community Event |
| | Unlawful Imprisonment |
| | |

119 **MAY MONTHLY TOTAL**

*570* ***YEAR TO DATE 2025***

(As of the end of May 2025)