CITY COUNCIL MEETING AGENDA

Monday, September 16, 2013, at 7 p.m.
Camas City Hall, 616 NE 4th Avenue

NOTE: There are two public comment periods included on the agenda. Anyone wishing to address the City Council may come forward when invited; please state your name and address. Public comments are typically limited to three minutes, and written comments may be submitted to the City Clerk. Special instructions for public comments will be provided at the meeting if a public hearing or quasi-judicial matter is scheduled on the agenda.

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL

IV. PUBLIC COMMENTS

V. CONSENT AGENDA

A. Approve the minutes of the September 3, 2013, Camas City Council Meeting and the Work Session minutes of September 3, 2013.
B. Approve claim checks as approved by the Finance Committee
C. Authorize the write-off of the August 2013 Emergency Medical Services billings in the amount of $31,677.53. This is the monthly uncollectable balance of Medicare and Medicaid accounts that are not collectable after receiving payments from Medicare, Medicaid and secondary insurance. (submitted by Pam O'Brien)
D. Authorize the Mayor to sign a professional services contract with BergerABAM for Project SS-356C NW Lake Road Wetland Mitigation Monitoring. The Professional Services Contract with BergerABAM is in the amount of $15,450. This contract is to provide wetland monitoring services for the two remaining years of the City's U.S. Army Corps of Engineers (USACE) Permit that was required for the roadway improvements on NW Lake Road/SE 1st Street. (submitted by Anita Ashton)
E. Authorize Pay Estimate No. 3 for Project SS-578 2013 NW Lake Road Invasive Species Removal to Green Tree Landscaping, Inc., in the amount of $1,499.30. The pay estimate is for work completed in August 2013. (submitted by Anita Ashton)
F. Authorize the Mayor to sign Change Order No. 3 for Project S-545 NW 38th Avenue/SE 20th Street Extension Roadway Improvements, Phase 1 to Tapani, Inc., in the amount of $256,331 (tax not applicable for Schedule A). This change order provides for bid item quantities that either exceeded 125% or were less than 75% of the original bid quantities, a correction to a previous change order for a design conflict, and an

increase in Topsoil Type B which is part of a lump sum bid item. This change order was introduced to Council at the September 3, 2013, Council Workshop. (submitted by Anita Ashton)

G. Authorize the Mayor to sign a memorandum of agreement with Clark County relating to Municipal Separate Storm Sewer Systems. This agreement defines the roles and responsibilities on interconnected municipal storm systems and transfer of storm systems through annexation. This agreement is a requirement for Clark County as a phase 1 permit holder. (submitted by Eric Levison)

H. Authorize the Mayor to sign Change Order No. 1 for Project P-862 Lacamas Lake Lodge to JWC, LLC in the amount of $13,959.44. This change order was discussed at the September 3rd workshop and includes items A through E as follows: A) Furnish and install conduits; B) CREDIT to Camas for storm system change; C) Furnish and install additional storm facilities; D) Furnish and install vinyl flooring; and E) Contractor reimbursement to contractor for Northwest Natural Gas service installation. (submitted by James Hodges)

NOTE: Any item on the Consent Agenda may be removed from the Consent Agenda for general discussion or action.

VI. NON-AGENDA ITEMS

A. Staff

B. Council

VII. MAYOR

A. Announcements

VIII. COMMUNITY DEVELOPMENT

A. Ordinance No. 2678 Adopting the 2013 City of Camas Comprehensive Plan Amendments, Zoning Map, Comprehensive Plan Map and Comprehensive Stormwater Drainage Plan

1. Details: An ordinance has been prepared by the City Attorney to adopt the revisions to the Camas Comprehensive Plan Map, Camas Zoning Map, and to adopt the Comprehensive Stormwater Drainage Plan as directed by City Council at the September 6, 2013, public hearing.

Department/Presenter: Phil Bourquin, Community Development Director and Sarah Fox, Senior Planner

Recommended Action: Adopt Ordinance No. 2678

B. Resolution No. 1277 Approving the Lacamas Northshore Development Agreement

1. Details: A resolution approving a development agreement between property owners in the Lacamas Northshore area and the City of Camas.

Department/Presenter: Phil Bourquin, Community Development Director

Recommended Action: Adopt Resolution No. 1277

C. Resolution No. 1278 to Set a Public Hearing Date for the SW 6th Avenue Vacation Request

1. Details: Burlington Northern Santa Fe (BNSF) is designing a siding track in west Camas. Part of the construction of this design will include building a retaining wall and re-grading the slope within the southernmost portion of existing right-of-way of the Old Evergreen Highway. The SW 6th Avenue paved roadway is located within the far northern portion of this right-of-way. Due to the extreme width of this right-of-way and the extent of the work to be performed by BNSF, staff recommended that BNSF file a vacation request. This vacation request is for a portion of right-of-way approximately 50 feet wide and located approximately ½ mile to ¾ mile west of SW Zillah Street. There are no existing improvements within this portion of the right-of-way. The width of the remaining right-of-way for SW 6th Avenue would be a minimum of 80 feet. Camas staff members have been notified and asked for feedback. Staff would recommend, if vacated, that the City maintain an easement for potential future utilities. No opposing comments were received from staff.

Department/Presenter: James Carothers, Engineering Manager
Recommended Action: Adopt Resolution No. 1278 setting the public hearing date for October 21, 2013, for the proposed vacation of a portion of SW 6th Avenue

IX. PUBLIC COMMENTS

X. ADJOURNMENT

XI. CLOSED SESSION

A. Labor Negotiations

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that a person with special needs has the opportunity to participate. For more information, please call 360.834.6864.

CITY COUNCIL WORKSHOP MEETING MINUTES -Draft
Tuesday, September 03, 2013 at 4:30 p.m.
Camas City Hall, 616 NE 4th Avenue

I. CALL TO ORDER

Mayor Scott Higgins called the meeting to order at 4:30 pm.

II. ROLL CALL

Present: Greg Anderson, Don Chaney, Tim Hazen, Steve Hogan, and Shannon Turk

Excused: Linda Dietzman, and Melissa Smith

Staff: Phil Bourquin, James Carothers, Leisha Copsey, Sherry Coulter, Jim Hodges, Cathy Huber Nickerson, Mitch Lackey, Eric Levison, Nina Regor and Nick Swinhart

Press: There were no members of the press present

Mayor Higgins stated that he will not be at the regular Council meeting and that Mayor pro tem Chaney will be conducting the meeting.

III. PUBLIC COMMENTS

There were no comments from the public.

IV. SPECIAL PRESENTATIONS

A. Columbia River Economic Development Council (CREDC) Update

Details: There was a short update given on the implementation progress of the Clark County Economic Development Plan.

Department/Presenter: Lisa Nisenfeld, CREDC President, and Bill Dudley, CREDC Board Chair

CREDC Presentation

Nisenfeld announced that she will be leaving the CREDC at the end of the month to pursue another opportunity.

Dudley gave Council a brief overview of the plans to replace Nisenfeld.

V. PUBLIC WORKS DEPARTMENT

A. Memorandum of Agreement (MOA) with Clark County for Interconnected Municipal Storm Systems

Details: This agreement defines the roles and responsibilities on interconnected municipal storm systems and transfer of storm systems through annexation. This agreement is a requirement for Clark County as a phase 1 permit holder.

Department/Presenter: Eric Levison, Public Works Director

Memorandum of Agreement

This item will be placed on the September 16, 2013, Consent Agenda for Council's consideration.

B. Miscellaneous and Updates

Details: Updates on miscellaneous or emergent items

Department/Presenter: Eric Levison, Public Works Director

There were no miscellaneous or emergent items.

VI. COMMUNITY DEVELOPMENT DEPARTMENT

A. Professional Services Contract with BergerABAM for Project No. SS-356C NW Lake Road Wetland Mitigation Monitoring

Details: The Professional Services Contract with BergerABAM is in the amount of $15,450.00. This contract is to provide wetland monitoring services for the two remaining years of the City's U.S. Army Corps of Engineers (USACE) Permit that was required for the roadway improvements on NW Lake Road/SE 1st Street.

Department/Presenter: James Carothers, Engineering Manager

Professional Services Contract

This item will be placed on the September 16, 2013, Consent Agenda for Council's consideration.

B. 2013 Downtown Parking Change Requests

Details: Council has determined that downtown parking change requests should be reviewed holistically and annually. September is the month that has been designated as review time. Staff reported the following requests for parking changes: C-TRAN/chauffeur pick-up spot in front of the apartments at 615 NE 6th Avenue; Liberty Theatre owner request for 3-hour parking downtown or more 6-hour spots; 10-minute spot for Caffe Piccolo Paridiso; relocate existing handicap space to the front of Dr. Bryan Harris' office; and the Downtown Camas

Association (DCA) program coordinator request to change some existing 2-hour parking spaces on NE 5th to 6-hour or 8-hour spaces. Staff has not formulated a presentation or illustrations of these requests at this time. Staff has recommendations for some, but not all, of these requests. There was also some discussion on the forming of a committee to recommend parking changes to Council. Council expectation from staff was being sought.

Department/Presenter: James Carothers, Engineering Manager, and Mitch Lackey, Police Chief

Council confirmed that the parking change requests that have been received should be reviewed through the process that has been established and that they would also like to explore the possibility of forming a parking advisory committee to handle future requests.

Staff will bring a detailed report regarding these requests back to a future Council workshop for discussion. A report will also be presented to Council before the end of the year detailing what a parking advisory commission could look like.

Bryan Harris, DDS, 316 NE Cedar Street, Camas, commented about his parking concerns.

C. SW 6th Avenue Vacation Request

Details: Burlington Northern Santa Fe (BNSF) is designing a siding track in west Camas. Part of the construction of this design will include building a retaining wall and re-grading the slope within the southernmost portion of existing right-of-way of the Old Evergreen Highway. The SW 6th Avenue roadway is located within the far northern portion of this right-of-way. Due to the extreme width of this right-of-way and the extent of the work to be performed by BNSF, staff recommended that BNSF file a vacation request. This vacation request is for a portion of right-of-way approximately 50 feet wide and located approximately 1,100 feet west to 1,800 feet west of SW Zillah Street. There are no existing improvements within this portion of the right-of-way. The width of the remaining right-of-way for SW 6th would be a minimum of 80 feet. Camas staff members have been notified and asked for feedback. Staff recommended, if vacated, that the City maintain an easement for potential future utilities. No opposing comments were received from staff. Staff recommended that a resolution be prepared to set a public hearing date for this vacation request. The recommended resolution date is September 16th and the recommended hearing date is October 21st.

Department/Presenter: James Carothers, Engineering Manager

Vacation Application

This matter will be set for a public hearing date of October 21, 2013, by adoption of a resolution at the September 16, 2013, Council Meeting.

D. Change Order No. 1 for Project P-862 Lacamas Lake Lodge

Details: Change Order No.1 is in the amount of $13,959.44 (not including tax).

Department/Presenter: James Carothers, Engineering Manager

Carothers stated that there was a numbering error in the notes of the change order which will be corrected.

This item will be placed on the September 16, 2013, Consent Agenda for Council's consideration.

Change Order No. 1

E. Change Order No. 3 for Project S-545 NW 38th Avenue/SE 20th Street Extension Roadway Improvements Phase 1

Details: Change Order No. 3 is to Tapani, Inc., in the amount of $256,331.00. This change order addresses overruns and under runs in quantities of bid items. The quantities shown in the original bid proposal included several quantities that were much lower than those actually required to construct the project. Staff anticipates that the change order will be fully funded by a Washington State Transportation Improvement Board (TIB) grant. Staff will submit to TIB for reimbursement of this overrun at the end of the construction.

Department/Presenter: James Carothers, Engineering Manager

Memorandum

Change Order No. 3

This item will be included on the September 16, 2013, Consent Agenda for Council's consideration.

F. Miscellaneous and Updates

Details: Updates on miscellaneous or emergent items

Department/Presenter: Phil Bourquin, Community Development Director

There were no miscellaneous or emergent items.

VII. CITY ADMINISTRATION

A. Miscellaneous and Scheduling

Details: Updates on Miscellaneous or scheduling items

Department/Presenter: Nina Regor, City Administrator

Regor informed Council that the City's Springbrook Enterprise System will be upgraded in October. She gave a brief overview of the timeline involved and noted that the system will need to be brought down for a couple of days during the transition, which will not allow staff to take payments or be able to assist citizens. Staff anticipates closing the finance counter during the transition on October 17th and 18th to train staff. Staff is currently becoming familiar with the software in order to minimize the down time for the citizens. The closure will be well publicized.

Regor also announced that the finance department is switching utility bill vendors and plans to contract with Databar. This vendor is located in Tukwila next to a major US Post Office to ensure more timely bills and provide more consistent service. Databar is familiar with Springbrook from other clients and has a proven record with other jurisdictions similar to Camas. She added that there is no budget impact with this contract because it is a replacement for a prior contract with another vendor.

VIII. COUNCIL COMMENTS AND REPORTS

Hogan commented about the "Camas in White" event that was held in downtown Camas on August 31st.

Chaney relayed comments to Council that he received from some citizens in regards to the maintenance of the Camas Cemetery. Levison responded to Chaney's comments.

Chaney reminded everyone that this Friday is the Camas High School's first football game of the season and encouraged everyone to attend.

Turk stated that she attended the Planning Commission meeting and commented about the comprehensive plan review that is on this evening's agenda.

Mayor stated that he will not be able to attend this evening's meeting due to a schedule conflict. He also commented about the "Camas Pride" banners that have been placed around the community.

IX. PUBLIC COMMENTS

Chris Kralik, 631 NW 18th Loop, Camas, commented about the BNSF agenda item.

X. ADJOURNMENT

The meeting adjourned at 5:44 p.m.

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that a person with special needs has the opportunity to participate. For more information, please call 360.834.6864.

Quick Preview of Agenda and Supporting Documents - Posted August 29, 2013

Workshop Agenda with Supporting Documents

_____ Mayor

_____ City Clerk

CITY COUNCIL REGULAR MEETING MINUTES - Draft
Tuesday, September 03, 2013 at 7:00 p.m.
Camas City Hall, 616 NE 4th Avenue

NOTE: There are two public comment periods included on the agenda. Anyone wishing to address the City Council may come forward when invited; please state your name and address. Public comments are typically limited to three minutes, and written comments may be submitted to the City Clerk. Special instructions for public comments will be provided at the meeting if a public hearing or quasi-judicial matter is scheduled on the agenda.

I. CALL TO ORDER

Mayor pro tem Chaney called the meeting to order at 7:00 p.m.

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL

Present: Greg Anderson, Don Chaney, Tim Hazen, Steve Hogan, Melissa Smith, and Shannon Turk

Excused: Linda Dietzman

Staff: Jerry Acheson, Phil Bourquin, Leisha Copsey, Sherry Coulter, Sarah Fox, Cathy Huber Nickerson, Roger Knapp, Mitch Lackey, Eric Levison, Nina Regor and Nick Swinhart

Press: Tyler Graf, The Columbian

IV. PUBLIC COMMENTS

There were no comments from the public.

V. CONSENT AGENDA

A. Approved the minutes of the August 19, 2013, Camas City Council Meeting and the Work Session minutes of August 19, 2013.

Work Session Minutes of August 19, 2013

City Council Meeting Minutes of August 19, 2013

B. Approved claim checks numbered 118226-118376, in the amount of $1,337,827.40.

C. Authorized Pay Estimate No. 2 for Project SS-579A 2013 NW Leadbetter and Grass Valley Park Wetland Maintenance to Sound Native Plants, Inc., in the amount of $1,658.76. The pay estimate is for work completed in June, 2013. (submitted by Anita Ashton)

Pay Estimate No. 2

D. Authorized Release of Retainage for Project S-576A 2013 Asphalt Repairs to Michael Green Construction, Inc., in the amount of $1,151.22. All required City and State project documentation has been received and verified. (submitted by Eric Levison)

Release of Retainage

E. Authorized Pay Estimate No. 2 for Project P-862 Lacamas Lake Lodge Building Improvements to JWC, LLC General Contractor for the work period ending August 23, 2013, in the amount of $375,558.80. The project is primarily funded by a state loan. (submitted by James Hodges)

Pay Estimate No. 2

F. Authorized the removal of two hazardous trees within Tract "D" at Hunter Ridge Estates and require mitigation planting. Mitigation of felled trees will require that the landowner replace the two (2) significant trees with four (4) replacement trees with a minimum caliper of two inches. The required trees shall be located within Tract "D" within close proximity of those that were removed. Installation of the trees must occur within six months of removing the hazardous trees. (submitted by Sarah Fox)

Staff Report

Hunter Ridge Estates

Hunter Ridge Estates Plat

G. Authorized the Mayor to sign the new Interlocal Agreement with the City of Washougal for animal control services. The City of Camas contracts for animal control services with the City of Washougal. This arrangement has been in effect since 1983, under the terms of an Interlocal Agreement. The 1983 Interlocal has become outdated and was in need of revision in several sections. The City of Washougal took the lead in revising the old Interlocal to meet the needs of the program. This was first presented at a Joint Camas/Washougal workshop on April 8, 2013, and was again presented at the workshop on August 19, 2013. (submitted by Mitch Lackey)

New Interlocal Agreement

H. Authorized Pay Estimate No. 4 for Project WS-720A 2013 STEP/STEF Tanking Pumping to AAA Septic Service in the amount of $4,206.00 for work completed through July 31, 2013. This project is budgeted and fully funded. (submitted by James Hodges)

Pay Estimate No. 4

I. Authorized Pay Estimate No. 5 for Project S-545 NW 38th Avenue/SE 20th Street Extension Roadway Improvements Phase 1 to Tapani, Inc., in the amount of $617,092.97. The pay estimate is for work completed from July 1, 2013 through July 31, 2013. (submitted by Anita Ashton)

Pay Estimate No. 5

J. Authorized the Mayor to sign a professional services contract with Moore Iacofano Goltsman (MIG), Inc. The Professional Services Contract with MIG, Inc., in the amount of $47,203 (includes optional tasks) is to assist the City with updating the Parks, Recreation, and Open Space Comprehensive Plan. The comprehensive plan is required by the Washington State Recreation and Conservation Office to be updated every six years to remain eligible to compete in certain grant programs administered by the agency. The City's last update was adopted in 2007. The project is budgeted and is expected to be completed by early 2014. (submitted by Jerry Acheson)

MIG Scope

Professional Services Contract (attachment revised - August 30, 2013)

K. Authorized Pay Estimate No. 1 (final) for Project S-576D 2013 Grind/Overlay Brady Road to Granite Construction Company in the amount of $82,553.29. Select bid items were increased based on site conditions including additional asphalt on Brady overlay and pavement repair sections. (submitted by Eric Levison)

Pay Estimate No. 1 (final)

L. Authorized the Bid Award for Project P-862B Heritage Park Phase 2 Boat Launch and Parking Improvements to Tapani, Inc., at their bid price of $391,432.40. Bids for this project were received and opened after 2 p.m. on August 27, 2013. A total of seven bids were received. The lowest responsive bid was submitted by Tapani Inc., which included state sales tax. The bids have been fully reviewed and staff recommends award of the subject project to Tapani, Inc. The project is budgeted and primarily funded by a Recreation and Conservation Office (RCO) Grant through the State of Washington. (submitted by James Hodges)

Bid Tab

It was moved by Melissa Smith, seconded by Greg Anderson to approve the Consent Agenda. The motion carried unanimously.

NOTE: Any item on the Consent Agenda may be removed from the Consent Agenda for general discussion or action.

VI. NON-AGENDA ITEMS

A. Staff

There were no comments from staff.

B. Council

Turk reminded everyone that the State of the Community event will be held at the Camas High School Theatre on Tuesday, September 24th.

Smith gave a brief overview of the Parks and Recreation Commission meeting and the Regional Transportation Council (RTC) meeting that she attended. She also distributed a copy of two resolutions that are being considered by the RTC and asked Council to provide her with any feedback they may have.

Hogan mentioned that the Downtown Camas Association (DCA) sponsored a fundraising event on Saturday called "Camas in White". He added that the event was well done. Hogan also noted that this Friday is First Friday.

VII. MAYOR

A. Announcements

Mayor Pro tem Chaney announced that the Camas High School Football Team has its opening season game on Friday and encouraged everyone to attend.

B. Day of Service Proclamation

Day of Service Proclamation

Mayor pro tem Chaney read a proclamation declaring September 14, 2013, as "2013 Day of Service".

C. Constitution Week Proclamation

Constitution Week Proclamation

Mayor pro tem Chaney read a proclamation declaring September 17-23, 2013, as "Constitution Week".

VIII. COMMUNITY DEVELOPMENT

A. Public Hearing - Lacamas Northshore Development Agreement

Details: Public hearing to consider a Development Agreement between Lacamas Northshore and the City of Camas. This agreement would replace a prior Development Agreement between the parties.

Department/Presenter: Phil Bourquin, Community Development Director

Revised Northshore Development Agreement

Recorded Northshore Development Agreement

Mayor pro tem Chaney opened the public hearing at 7:18 p.m.

The following members of the public gave testimony:

- Carolyn Foster, 2850 NW Lacamas Drive, Camas
- Kim Logan, 9513 SE 14th Street, Vancouver
- Attorney James Howsley, 1499 SE Tech Center Place, Suite 380, Vancouver
- Attorney Randy Printz, 805 Broadway Street, Suite 1000, Vancouver
- Michael Mills (no address given)
- Henry Diaz, 3713 Grant Street, Vancouver
- Mary Vogel, 1024 SW Main Street, Portland
- Neil Cahoon, 26300 NE 3rd Street, Camas
- John Sentesy, 1707 NW Lacamas Drive, Camas
- Mike Biegalke, 27317 NE 9th Street, Camas
- Jim Metzger, 265 SE 276th Avenue, Camas
- Mark Paras, 3023 NE 2nd Avenue, Camas

Logan distributed a letter and map outlining the redistribution of the Mills' family lots. These documents were entered into the record as "Exhibit 1".

Mayor pro tem Chaney closed the public hearing at 7:59 p.m., as there was no further public testimony.

The following amendments were made to the Revised Development Agreement for the Lacamas Northshore Properties: *Section 6.2* - lowering the number of units that can be built on the MF-10 property (parcel No. 177884-000) from 190 units to 150 units and increasing the number of units that can be built on the MF-18 property (parcel No. 177885-000) from 167 to 207; and *Section 8* - replace the acronym LNP in the last sentence to the Lacamas Northshore area.

It was moved by Greg Anderson, seconded by Melissa Smith to approve the Lacamas Northshore Development Agreement as amended. The motion carried unanimously.

The City Attorney was directed to prepare a resolution to adopt the revised development agreement at the September 16, 2013, Council Meeting.

The meeting went into a short recess at 8:10 p.m. The meeting reconvened at 8:17 p.m.

B. Public Hearing to Consider the 2013 Comprehensive Plan Amendments

Details: The City received one application from Daley, MacDonald & Mackay (File No. CPA13-01), and has carried forward two proposals from the 2012 annual review, which are named North Dwyer Creek (File No. CPA12-02) and North Shore (File No. CPA12-01). The City also proposed to adopt a Comprehensive Stormwater Drainage Plan. The Planning Commission forwarded a recommendation of approval for the consolidated amendments on August 20, 2013. The map amendments, along with corrections to minor mapping errors, are displayed on a draft "Camas Comprehensive Plan" map and a draft "Camas Zoning" map, which are available for review on the City's website.

Department/Presenter: Phil Bourquin, Community Development Director and Sarah Fox, Senior Planner

Staff Report on 2013 Comprehensive Plan Amendments

Staff Report on Northshore Comprehensive Plan Amendment

Staff Report on Comprehensive Storm Drainage Plan

Draft Comprehensive Plan Map

Draft Zoning Map

Rose Property Analysis

Fox stated that there was a recommendation from the representative of the Rose property to change page three of the staff report to reflect that only 10 acres of the Rose property would be designated as Commercial. She added that staff has no objections to the recommendation.

Mayor pro tem Chaney opened the public hearing at 8:22 p.m.

The following members of the public gave testimony:

- Attorney James Howsley, 1499 SE Tech Center Place, Suite 380, Vancouver
- Henry Diaz, 3713 Grant Street, Vancouver
- Attorney Randy Printz, 805 Broadway Street, Suite 1000, Vancouver

Mayor pro tem Chaney closed the public hearing at 8:30 p.m., as there was no further public testimony.

It was moved by Melissa Smith, seconded by Shannon Turk to approve the North Dwyer Creek Comprehensive Plan amendments and zoning (File No. CPA12-02) as recommended. The motion carried unanimously.

It was moved by Melissa Smith, seconded by Steve Hogan to approve the Lacamas Northshore Comprehensive Plan amendments and zoning (File No. CPA12-01) as recommended. The motion carried unanimously.

It was moved by Melissa Smith, seconded by Greg Anderson to approve the Daley, MacDonald & Mackay Comprehensive Plan amendments and zoning (File No. CPA13-01) as recommended. The motion carried unanimously.

It was moved by Melissa Smith, seconded by Shannon Turk to approve the Rose property Comprehensive Plan amendments and zoning as recommended. The motion carried unanimously.

It was moved by Melissa Smith, seconded by Shannon Turk to approve the Comprehensive Stormwater Drainage Plan as recommended. The motion carried unanimously.

It was moved by Melissa Smith, seconded by Greg Anderson to approve the amendments to the City of Camas Draft Comprehensive Plan Map as recommended. The motion carried unanimously.

It was moved by Greg Anderson, seconded by Melissa Smith to approve the amendments to the City of Camas Draft Zoning Map. The motion carried unanimously.

The City Attorney was directed to prepare an ordinance for adoption at the September 16, 2013, Council Meeting.

IX. FIRE

A. Staffing for Adequate Fire and Emergency Response (SAFER) Grant Application

Details: As Council knows, the fire department applied for, and was awarded, a federal grant to pay for the hire of three firefighters in 2012. That grant funding expires in August of 2014. Without increased revenues or substantially decreased expenditures, it is anticipated these positions will have to be eliminated once the funding runs out. Currently the SAFER Grant application period is open once again and the department is proposing applying for the grant to continue funding the SAFER positions for two additional years beyond August 2014. Over 70 percent of the grant funding this year is being reserved for maintaining SAFER hires, so the department feels that the City has a good chance and that staff should at least attempt to get the grant again. Being awarded the grant again would amount to a two year extension of the City's current SAFER Grant. Chief Nick Swinhart and City Administrator Nina Regor were present to answer questions.

Department/Presenter: Nick Swinhart, Fire Chief

2013 SAFER Grant Application (attachment posted - August 30, 2013)

It was moved by Greg Anderson, seconded by Steve Hogan to authorize the submittal of the 2013 SAFER Grant application. The motion carried unanimously.

X. PUBLIC COMMENTS

Ken Hadley, 4011 F Circle, Washougal, congratulated Councilmember Chaney for a job well done as Mayor pro tem. He also commended staff for their work on the development agreements and the Stormwater Drainage Plan.

Chris Wamsley (no address given) stated that she works for County Properties East and echoed Hadley's comments regarding staff's work.

XI. ADJOURNMENT

The meeting adjourned at 8:39 p.m.

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that a person with special needs has the opportunity to participate. For more information, please call 360.834.6864.

Quick Preview of Agenda and Supporting Documents - Posted August 28, 2013

Council Agenda with Supporting Documents

_____ Mayor

_____ City Clerk

BergerABAM

[illegible] Main Street, Suite [illegible], Vancouver, Washington [illegible]
[illegible]

6 August 2013

Ms. Anita Ashton
Engineering Department
City of Camas
616 NE Fourth Avenue
Camas, Washington 98607

Subject: Proposal to Provide Professional Environmental Services for Wetland Mitigation Monitoring

Dear Ms. Ashton:

We are pleased to submit the following proposal to provide professional environmental services to conduct 2 years of mitigation monitoring and maintenance contractor oversight for the NW Lake Road/SE First Street Road Improvement Project wetland mitigation site in Camas, Washington.

SCOPE OF WORK

State (Washington Department of Ecology) and federal (U.S. Army Corps of Engineers [USACE]) wetland permits require that the mitigation site be monitored for at least 10 years to evaluate whether the mitigation is successful. BergerABAM has conducted the first 8 years of monitoring at the site. BergerABAM will conduct off-year monitoring in 2014, and will prepare a brief memorandum for the City's files. In 2015, BergerABAM will conduct annual monitoring and will prepare and submit a final monitoring report to Ecology and USACE, along with a request for written approval of mitigation site success and release from further monitoring requirements.

Task 1: Mitigation Monitoring and Report (Year 10)

Monitoring is required under the wetland permits for each monitoring year (years 1, 2, 4, 8, and 10). Monitoring has already been completed for years 1, 2, 4, and 8. As part of this contract, BergerABAM will visit the site in Year 10 to:

- Take ground-level photographs from representative photographic monitoring points.
- Evaluate the plant communities at established vegetation sample plots based on percent cover by species.
- Assess the site's general groundwater and surface hydrology descriptively and quantitatively. The mitigation hydrology performance will be assessed by observations of saturation to the surface or water standing in monitoring wells dug with an auger in regular areas (within plots).
- Record a general descriptive assessment of water quality in the mitigation area.

- Record a general descriptive assessment of the plant communities, evaluating plant stress and condition and the extent of invasive species and nuisance vegetation.

Data from the site visit will be evaluated and included in the final monitoring report. The report will discuss the existing conditions of the wetland mitigation area: hydrology, soil, vegetation, control of exotic species, and erosion.

Changes and trends in the vegetation communities from the last monitoring period will be identified qualitatively (notes and observations, interpretation of photos, etc.) and quantitatively on data sheets (plant counts, percent vegetation cover) with the rationale for changes included. The monitoring report will compare information obtained in the field against the wetland mitigation plan, the as-built report, and other prior monitoring information, and will evaluate the ways in which the site has satisfied the goals and objectives established in the mitigation plan. The report will also summarize relevant agency discussions, adaptive management techniques, and other ways in which the site has been actively managed to achieve success. This scope of work assumes that agency and City comments will be minor in content and brief in extent.

This scope of work also includes up to 8 hours to coordinate with agency staff from Ecology, and USACE to secure written approval of mitigation site success and written release from further monitoring at the site. Coordination will occur via telephone and/or e-mail. A BergerABAM scientist will also be available for a joint agency site visit (not to exceed 4 additional hours), if one be requested by the agencies.

Deliverables

- One copy of the draft monitoring report (one electronic copy to Client)
- Three copies of the final monitoring report (one hard copy to each agency; hard copy and electronic copy to Client)
- Up to 8 hours for agency coordination
- One 4-hour site visit with regulatory agencies, if requested by the agencies

Task 1 Cost Estimate: *$7,250 Labor and Expenses*

Task 2: Off-Year Memorandum (Year 9)

BergerABAM will conduct a site visit during the growing season during Year 9 to assess overall site conditions. Following the visit, BergerABAM will prepare and submit an off-year memorandum to the City that addresses hydrology, weed control, vegetation health, and any new or ongoing problems that may be present. This memorandum is not required by the wetland permits, but is a means by which problems and issues can be documented and addressed in a timely manner.

Deliverables

- One copy of the draft off-year monitoring memorandum (one electronic copy to Client)
- Three copies of the final off-year monitoring memorandum (hard copy and electronic copy to Client)

Task 2 Cost Estimate: *$4,400 Labor and Expenses*

Task 3: Landscape Maintenance Oversight

This task includes time for coordination with a maintenance contractor selected by the City to perform invasive species maintenance activities at the site. This scope of work assumes that the maintenance contractor will contract directly with the Client. This scope of work includes up to 16 hours annually to assist the City with preparation of bid specification language, attend a pre-bid meeting and site visit (if requested), and to conduct quarterly maintenance inspections at the site.

Task 3 Cost Estimate: *$3,800 Labor and Expenses*

COST

At this time, professional fees and expenses are estimated to total $15,450 for 2 years of mitigation monitoring and related tasks. Professional fees and expenses will be billed as they are incurred according to the attached professional rate and expense schedules. If the project exceeds the estimated $15,450, the City will be notified by letter of the additional cost.

If you wish to accept this proposal, please provide us with a contract for the services described. Receipt of your fully executed contract will be our notice to proceed. This proposal is valid for 30 days.

We look forward to your favorable consideration and to working with you. If you have questions, please call me at 360/823.6110. We want to be of service.

Sincerely,

Dan Gunderson
Senior Scientist

Brian Carrico, AICP
Natural Resources Team Lead

DG:llt
Attachment
Standard Time and Expense Rates

Scott Higgins, Mayor Date
City of Camas

STANDARD TIME AND EXPENSE CHARGES

Subject to BergerABAM's Standard Terms and Conditions

Personnel Categories	**Hourly Billing Rates** [1]
Project Managers/Senior Specialists (Grades VII through IX)	$160 - $375
Project Engineers (Grades V and VI)	$120 - $180
Senior Engineers (Grade IV)	$105 - $130
Design Engineers (Grades I through III)	$80 - $120
Licensed Surveyors	$135 - $180
Survey Technicians	$95 - $135
Scientists, Planners, and Environmental Specialists	$75 - $205
Public Involvement Specialists	$80 - $120
Drafters, Designers, and BIM Specialists/Graphics	$75 - $165
Technicians and Construction Specialists	$70 - $180
Project Administration and Technical Support	$50 - $165

Underwater Inspection	**Daily Billing Rates**[1]
Crew, Three Persons (including dive equipment except as noted below)	$5,100[2] [3]
Crew, Four Persons (including dive equipment except as noted below)	$6,200[2] [4]
Shallow Water Dive System (applicable when daily crew rates are not used)	$250
Dive Control Trailer (including dive equipment except as noted below)	$250
Underwater Digital Still Camera	$150
Underwater Ultrasonic Thickness Gauge	$150
Underwater Video Camera	$175

Work Boats	**Daily Billing Rates**
21-Foot Dive Boat and Motor	$275
16-Foot Work Boat and Motor	$190
12-Foot Work Skiff and Motor	$150
Canoe	$90

Surveying	**Hourly Billing Rates**
Crew, One Person (GPS[5] or robotic)	$120 - $200
Crew, Two Persons (GPS or traditional)	$150 - $225

Project-related Expenses	**Amount**
Reimbursable Expenses	Cost Plus 10%
Subconsultants/Subcontractors	Cost Plus 10%

(1) Billing rates are adjusted annually effective 1 July based on individual salary increases.
(2) Mobilization/demobilization and report preparation are considered separately and are performed at our standard rates.
(3) Surface-supplied air (SSA).
(4) Based on OSHA requirements for SCUBA or for diving (SSA and SCUBA) under EM 385-1-1.
(5) Global Positioning System (GPS).

CITY OF CAMAS
PROJECT NO. SS-578
DESCRIPTION: 2013 NW Lake Road
Invasive Species Removal

PAY ESTIMATE: THREE
PAY PERIOD: September 16, 2013
WORK PERIOD: August, 2013
(Work Period-Bid Item #4 - 3rd Maintenance)
Original Contract Total: $9,600.00
(Does Not Include Sales Tax)

Green Tree Landscaping, Inc.
1157 3rd Avenue, Suite 220
Longview, WA 98632

360.880.8733

ITEM NO.	DESCRIPTION	UNIT	ORIGINAL QUANTITY	UNIT PRICE	CONTRACT TOTAL	QUANTITY PREVIOUS	TOTAL PREVIOUS	QUANTITY THIS EST.	TOTAL THIS EST.	QUANTITY TO DATE	TOTAL TO DATE
1	Mobilization	LS	1.00	$1,000.00	$1,000.00	0.50	$500.00	0.25	$250.00	0.75	$750.00
2	Invasive Species Removal (April)	LS	1.00	$5,000.00	$5,000.00	1.00	$5,000.00	0.00	$0.00	1.00	$5,000.00
3	Invasive Species Removal (June)	LS	1.00	$1,200.00	$1,200.00	1.00	$1,200.00	0.00	$0.00	1.00	$1,200.00
4	Invasive Species Removal (August)	LS	1.00	$1,200.00	$1,200.00	0.00	$0.00	1.00	$1,200.00	1.00	$1,200.00
5	Invasive Species Removal (October)	LS	1.00	$1,200.00	$1,200.00	0.00	$0.00	0.00	$0.00	0.00	$0.00
	Subtotal				**$9,600.00**		**$6,700.00**		**$1,450.00**		**$8,150.00**
	Change Orders										
1											
							$0.00		**$0.00**		$0.00

	ORIGINAL CONTRACT TOTAL	TOTAL PREVIOUS	TOTAL THIS EST.	TOTAL TO DATE
ORIGINAL CONTRACT TOTAL	**$9,600.00**	$6,700.00	**$1,450.00**	$8,150.00
CHANGE ORDERS TO DATE	-----	$0.00	**$0.00**	$0.00
SUBTOTAL	**$9,600.00**	$6,700.00	**$1,450.00**	$8,150.00
SALES TAX (8.4%)	**$806.40**	$562.80	**$121.80**	$684.60
TOTAL CONTRACT	**$10,406.40**	$7,262.80	**$1,571.80**	$8,834.60
RETAINAGE WITHHOLDING 5%	**($480.00)**	($335.00)	**($72.50)**	($407.50)
TOTAL LESS RETAINAGE	**$9,926.40**	**$6,927.80**	**$1,499.30**	$8,427.10

Account Number: 419-00-553-500-48 **$1,499.30**

Anita Ashton 9/6/13
Project Engineer Date

Jacqueline Massey 9/5/13
Contractor Date

James Hodges 9/6/13
Project Manager Date

City of Camas
Contract Change Order

Order No. 3 Date September 3, 2013

Contract for S-545 NW 38th/SE 20th Roadway Improvements, Ph. 1

To Tapani, Inc.
(Contractor)

You are hereby requested to comply with the following changes from the contract plans and specifications:

Description of Changes (Supplemental Plans and Specifications Attached)	*Decrease in Contract Price*	Increase in Contract Price
A. **INCREASE Quantity of BI #A12** – Roadway Excavation, Including Haul – (3,752 CY to 8,725 CY) by 4,973.0 CY @ $18.00/CY =		$ 89,514.00
B. **INCREASE Quantity of BI #A14** – Gravel Borrow, Including Haul – (9,600 CY to 19,128 CY) by 9,528.0 CY @ $20.00/CY =		$ 190,560.00
C. **INCREASE Quantity of BI #A16** – Construction Geotextile for Separation – (1,875 SY to 3,164 SY) by 1,289.0 SY @ $1.50/SY =		$ 1,933.50
D. **DECREASE Quantity of BI #A29** – Steel Reinforced Bar for Concrete Traffic Barrier – (109,216 LBS to 48,825 LBS) by 60,391.0 LBS.@ $0.25 =	*($ 15,097.75)*	
E. **DECREASE Quantity of BI #A30** – Steel Reinforced Bar for Retaining Wall – (65,120 LBS to 35,885 LBS) by 29,235.0 LBS.@ $0.25 =	*($ 7,308.75)*	
F. **INCREASE Quantity of BI #A96** – Pond Excavation, Including Haul – (2,350 CY to 2,957 CY) by 607.0 CY @ $10.00/CY =		$ 6,070.00
G. **DECREASE Quantity of BI #A97** – Pond Excavation For Embankment – (2,200 CY to 1,408 CY) by 792.0 CY @ $8.00/CY =	*($ 6,336.00)*	
H. **DECREASE Quantity of BI #A101 – Corrugated Polyethylene** Storm Sewer Pipe, 8" Dia. – (321 LF to 135 LF) by 186 LF @ $20.00 LF =	*($ 3,720.00)*	
I. **DECREASE Quantity of BI #A104 – Catch Basin, Type 1** Catch Basin, Type 1 – (2 EA to 1 EA) by 1 EA @ $1,700.00 EA =	*($ 1,700.00)*	
J. **DECREASE Quantity of BI #A115 – Modular Block** Wall – Retaining Wall C – (1,450 SF to 782.6 SF) by 667.4 SF @ $10.00/SF =	*($ 6,674.00)*	
K. **INCREASE CCO#6-Revised (Originally submitted under CO#2) –** Storm facility design conflict resulted one storm pipe dissecting another storm pipe. Redesign required.		$ 3,590.00

L.	**INCREASE Quantity of Topsoil Type B, (BI #A71 – Landscaping)** Addendum #2 Quantity = 1,510 CY; Actual Quantity = 2,458 CY	$ 5,500.00
	Total:	$256,331.00
	Sales Tax – N/A to Schedule A:	0.00
	Net Change in Contract Price:	**$256,331.00**

Explanation: Items A, B, C, D, E, F, G, H, I, and J: The actual quantities required for these items either exceeded the bid quantities by more than 125%, or were less than 75% of the original bid quantities. The unit prices shown are the same unit prices submitted by the Contractor for these items. Item K: CCO#6 as submittal under CO#2 was incorrect. The CCO#6-Revision has been corrected. Original design resulted in a conflict between two pipes. Re-design eliminated 186 LF of plastic pipe (A101) & 1 catch basin (A104) and installed 44 LF ductile iron pipe & 144 LF of new ditch. Item L: Topsoil B is part of a lump sum landscaping bid item. The quantity to bid was estimated at 1,510 CY, with the actual quantity calculated at 2,458 CY. The Contractor requested compensation for additional quantity at $11,000.00. City agreed to 50%. All items approved in the field at time of construction by Project Engineer (A. Ashton) and Project Manager (J. Hodges).

The amount of the contract, prior to sales tax, will be (decreased) (**increased**) by the sum of: two hundred fifty-six thousand, three hundred thirty-one dollars and zero cents ($256,331.00).

The contract total, including the original contract total, this and previous change orders will be: Three million nine hundred thirty-two thousand, five hundred eleven dollars and ten cents ($3,932,511.10). **Sales tax is included in this total.**

The contract period provided for completion will be (**increased**) (decreased) (unchanged): 8 days.

This document will become a supplement to the contract and all provisions will apply hereto.

Requested	James Hodges Project Manager	9/10/2013 Date
Recommended	Engineering Manager	9/10/2013 Date
Accepted	Contractor	9/09/2013 Date
Approved	Mayor	Date

MEMORANDUM OF AGREEMENT
TO CLARIFY ROLES AND RESPONSIBILITIES BETWEEN INTERCONNECTED MUNICIPAL SEPARATE STORM SEWER SYSTEMS

This Agreement is made and entered into effective September 1, 2013 by and between the undersigned parties.

PURPOSE: It is the purpose of this Agreement to ensure effective and efficient stormwater management through careful coordination of responsibilities among agencies, and to clarify roles and responsibilities pertaining to connections between Municipal Separate Storm Sewers (MS4s).

WHEREAS, the parties hereto are charged with the responsibility of constructing and maintaining their MS4s.

WHEREAS, the Departments are the owners or operators of MS4s covered under Phase I or Phase II National Pollutant Discharge Elimination System and State Waste Discharge General Permits issued by the Washington State Department of Ecology (Permits).

WHEREAS, there are numerous connections between respective MS4s.

WHEREAS, the Permits covering each respective agency requires the mapping of connection points between the MS4s of municipalities and other public entities.

WHEREAS, the Permits also require the establishment of coordination mechanisms clarifying roles and responsibilities for the control of pollutants between physically interconnected MS4s.

WHEREAS, cooperative and coordinated management of connected MS4s is essential to adequately protect the water resources of our community from the potential adverse impacts associated with runoff.

WHEREAS, it is believed that the need today for efficiencies and economies of scale for public agencies is greater than ever.

NOW THEREFORE, in consideration of the terms, conditions, covenants and performances contained herein, or attached and incorporated and made part hereof,

THE PARTIES AGREE AS FOLLOWS:

1. The respective MS4s comprise catch basins, field inlets, discharge points, flow control and treatment facilities, infiltration systems, manholes, fittings, cleanouts, pumps, connections, pipes, and ditches within respective jurisdictional boundaries/rights-of-way.

2. Annexation or route jurisdiction transfer of rights-of-way or other property will include associated stormwater facilities. The transferring jurisdiction shall turn over available records including stormwater conveyance and facility as-built drawings, capital design plans,

stormwater facility inspection and maintenance records for five previous years, and records of illicit discharge inspections and pollutant source investigations for five previous years.

3. Departments will implement the requirements of the Permits within their municipality and manage stormwater runoff, which includes:
    a. Coordinate activities which may affect the quantity or quality of stormwater discharged into interconnected MS4s, including mapping connection points and locating illicit discharges transmitted from one MS4 to another.
    b. Maintain and operate their respective MS4s in accordance with the terms of their respective Permits.
    c. Respond to notification that an illicit discharge may be transferring pollutants between interconnected MS4s.
    d. Immediately notify the other Departments when an illicit connection or illicit discharge is suspected to be discharging across an MS4 connection point.
    e. Immediately notify the Department of Ecology Spill Response Line and then the subject municipality of a spill that could transfer pollutants between interconnected MS4s.
    f. Coordinate, to the extent directed by elected officials, activities such as basin planning and stormwater regulation development.
    g. Coordinate response to drainage complaints or problems associated with interconnected MS4s.
    h. Designate a contact person or persons responsible for implementing this agreement (Attachment A). Attachment A may be revised without amending this Agreement.

TERM AND AMMENDMENT:

This Agreement becomes effective when signed by all the parties and remains in effect without end. The right is reserved by the parties to this Agreement to terminate at any time by giving thirty (30) days written notice to the other party or parties. This Agreement may be amended at any time upon agreement of the parties, but only written amendments will bind them.

SIGNED:

Scott Sawyer, P.E., Director Battle Ground Public Works	City of Camas
Peter Capell, P.E., Director Clark County Public Works	Don Benton, Director Clark County Environmental Services
Brian Carlson, P.E., Director Vancouver Public Works	James Dunn, Director Washougal Public Works

Attachment A: Designated Contact Persons

Department	Name	Title	Phone	email
Battle Ground Public Works			342-5069	bryan.kast@cityofbg.org
Camas Public Works	Eric Levison	Public Works Director	817-7003	elevison@ci.camas.wa.us
Clark County Environmental Services	Rod Swanson	Permit Coordinator	397-2121, 4581	rod.swanson@clark.wa.gov
Clark County Public Works	Scott Wilson	Superintendent	397-1616, 2446	scott.wilson@clark.wa.gov
Vancouver Public Works	Annette Griffy	Utility Engineering Program Manager	487-7190	Annette.Griffy@cityofvancouver.us
Washougal Public Works	James Dunn	Public Works Director	835-2662, 204	jdunn@ci.washougal.wa.us

City of Camas
Contract Change Order

Order No. 1 Date Sept 3, 2013

Contract for P-862 Lacamas Lake Lodge

To JWC LLC
(Contractor)

You are hereby requested to comply with the following changes from the contract plans and specifications:

Description of Changes (Supplemental Plans and Specifications Attached)	Decrease in Contract Price	Increase in Contract Price
A. Addition of 1" conduits for future security cameras (LS).		$2,254.51
B. Credit for adjustment in storm line. (LS)	($1,944.00)	
C. Modifications required by City including (2) additional storm cleanouts, additional storm pipe, 36" manhole lid, storm outfall improvements, downspout cleanouts. (LS)		$6,485.52
D. Vinyl flooring in mechanical room. (LS)		$3,730.41
E. Reimbursement for installation of NW Natural gas service. (LS)		$3,433.00
Totals:	($1,944.00)	$15,903.44
Net Change in Contract Price:		$13,959.44

NOTES:

A. Addition of conduits installed from IT room to the outside of the building, conduit through the parking lot to the swale area, and conduits in three light pole bases for future installation of outside security cameras. (Ref. COP #002-R1, COP #005, COP #010) Approved by Jerry Acheson.

B. The location of the catch basin on the east side of the parking lot entrance had to be adjusted due to the proximity of the natural gas main resulting in a shorter storm line. (Ref COP#007) Approved by Jerry Acheson

C. Minor changes were requested by Operations to facilitate future maintenance. (Ref COP#008) Approved by Jerry Acheson.

D. It has been determined that vinyl flooring will help prevent damage to walls and ceilings in the event of a potential mechanical failure and water leak. Original plans called for bare plywood surface. (Ref COP#008) Approved by Jerry Acheson.

E. Original service was damaged during tree removal. New service had to be installed. (Ref Reimbursement Request #001) Approved by Jerry Acheson.

Continued.

The amount of the contract will be (~~decreased~~) (increased) by the sum of: Thirteen thousand nine hundred fifty nine and 44/100 dollars ($13,959.44).

The contract total including this and previous change orders will be: One million six hundred eighty six thousand nine hundred ten and 44/100 dollars ($ 1,686,910.44).

The contract period provided for completion will be (~~increased~~) (~~decreased~~) (unchanged): 210 days.

This document will become a supplement to the contract and all provisions will apply hereto.

Requested	_____	_____ Date
Recommended	James Hodges Project Manager	8/27/2013 Date
Accepted	Contractor	8/27/13 Date
Approved	_____	8/28/13 Date

ORDINANCE NO. 2678

AN ORDINANCE adopting revisions to the Camas Comprehensive Plan Map and the City of Camas Zoning Map and adopting the Comprehensive Stormwater Drainage Plan.

WHEREAS, the City of Camas has heretofore adopted a Comprehensive Plan and Comprehensive Land Use Map as required by the provisions of RCW 36.70A, Revised Code of Washington, the Growth Management Act, and

WHEREAS, under Chapter 36.70A, Revised Code of Washington, the City is required annually to consider amendments to the land use element of the Comprehensive Plan and associated rezones, and

WHEREAS, the Planning Commission has conducted a public hearing on the requests for revisions submitted to the City, and has forwarded its recommendation to the City Council, and

WHEREAS, the City Council has conducted a public hearing on the requests for revisions,

NOW, THEREFORE, THE COUNCIL OF THE CITY OF CAMAS DO ORDAIN AS FOLLOWS:

Section I

A request from property owners, Daley, MacDonald & Mackay, proposed to change the Comprehensive Plan and Zoning designation for three contiguous parcels, located north of NW 18th Avenue and west of NW Brady Road, with a combined 28.19 acres. The request is to amend the Comprehensive Plan and Zoning from Light Industrial/Business Park (LI/BP) to a Comprehensive Plan designation of Industrial with an associated Zoning of Business Park (BP). The City Council hereby adopts the recommendation of Planning Commission, and directs the Community Development Director to amend the Camas Comprehensive Plan map to designate the 28.19 acres as Industrial. The Community Development Director is further directed to amend the Camas Zoning map to designate the 28.19 acres as Business Park.

Section II

A request from eleven property owners, collectively known as Lacamas Northshore, to change the Comprehensive Plan and Zoning Designation of their contiguous 20 parcels, which are located north of Lacamas Lake to the northern and eastern city limits, for a combined 460 acres (refer to Table 1). The request is to amend the Comprehensive Plan and Zoning from Light

Industrial/Business Park (LI/BP) to the following Comprehensive Plan designations: Industrial for 314.77 acres; Multi-family High for 59.86 acres; Multi-family Low for 35.62 acres; Single-family Medium for 40 acres; Commercial for 4.48 acres; and Open Space for 5.60 acres. The request is to amend the 460 acres with the following associated zoning designations: Business Park for 314.77 acres; Multi-family-18 (MF-18) for 59.86 acres; Multi-family 10 (MF-10) for 35.62 acres; Residential-7,500 (R-7.5) for 40 acres; Community Commercial (CC) for 4.48 acres; and Open Space (OS) for 5.60 acres. The City Council hereby adopts the recommendation of Planning Commission, and directs the Community Development Director to amend the Camas Comprehensive Plan map to designate the properties as described and as illustrated on Exhibit A. The Community Development Director is further directed to amend the Camas Zoning Map as described at Table 1 and as illustrated on attached Exhibit A, with the effective date of the zoning change to be as of the date of recording with the Clark County Auditor of the Development Agreement approved by the City Council under Resolution No. 1207.

Section III

The City requests to amend the Comprehensive Plan and Zoning designations for the area known as the North Dwyer Creek Master Plan, which is generally bounded by NW Lake Road, NW Friberg Street, NE Goodwin Road, and Lacamas Creek, with a combined 688 acres. The request is to amend the Comprehensive Plan designations of 157.73 acres from LI/BP and Single-family Medium to Industrial, Multi-family Low, and Single-family Low with associated zoning of Business Park (BP), Multi-family 10,000 (MF-10), and Residential 15,000 (R-15). The City Council hereby adopts the recommendation of Planning Commission, and directs the Community Development Director to amend the Camas Comprehensive Plan map to designate the properties as illustrated on Exhibit B as follows: Industrial for 92.61 acres; Multi-family Low for 44.23 acres; and Single-family Low for 20.89 acres. The City Council hereby adopts the recommendation of the Planning Commission, and directs the Community Development Director to amend the Camas Zoning map as described in Table 1 as follows: Business Park (BP) for 92.61 acres, Multi-family 10 (MF-10) for 44.23 acres, and Residential 15,000 (R-15) for 20.89 acres.

Section IV

The City requests to amend the Comprehensive Plan and Zoning designation for two parcels, known as the Rose Property, which is bounded on three sides by the Lacamas Northshore area, for a combined 54 acres (refer to Table 1). The proposal is to amend the Comprehensive Plan and Zoning of LI/BP to Comprehensive Plan designations of Commercial and Single-Family Medium. The City Council hereby adopts the recommendation of Planning Commission, and directs the Community Development Director to amend the Camas Comprehensive Plan map to designate 10 acres as Commercial and the remainder of the combined parcels as Single-family Medium. The Community Development Director is further directed to amend the Camas Zoning Map to designate 10 acres as Community Commercial (CC) and the remainder of the combined parcels as Residential-12,000 (R-12).

Section V

The proposal includes multiple amendments to correct inadvertent errors found on the current Camas Comprehensive Plan map and Camas Zoning map, as follows:

A. Open space designated land at the Lake Hills property (parcel #84840-000) to be amended based on a recorded survey.

B. Comprehensive plan and zoning designation of City-owned property along NW Parker Street (parcels #177696-000 and #986028-114), to be amended from LI/BP to Open Space.

C. Comprehensive plan designation of City-owned property, within the UGB and adjacent to Lacamas Lake (parcel #178099-000), to be amended from Single-family Low to Open Space.

D. Mixed use overlay area within North Dwyer Creek to be amended from Comprehensive Plan designation of LI/BP to Multi-family Low, to match the existing zoning overlay.

The City Council hereby adopts the recommendation of the Planning Commission and directs the Community Development Director to amend the Comprehensive Land Use Map and Zoning Map of the City of Camas to correct the inadvertent errors as noted herein.

Section VI

The proposal includes an amendment to the Comprehensive Plan, by adopting the Comprehensive Stormwater Drainage Plan (dated April 2013), attached as Exhibit C. The plan provides strategies for stormwater treatment, identifies improvement projects and associated costs, and will provide necessary documentation of planned projects to meet grant application requirements. The City Council hereby adopts the recommendation of the Planning Commission to amend the Comprehensive Plan by including the Comprehensive Storm Drainage Plan.

Section VII

The City Council hereby adopts the recommendation of the Planning Commission and directs the Community Development Director to amend the Camas Comprehensive Plan map and City of Camas Zoning map as described in Sections I through V of this Ordinance, Table 1, and attached as Exhibits D (Camas Comprehensive Plan map) and E (Camas Zoning map). Further, the City Council hereby adopts the recommendation of the Planning Commission to amend the Comprehensive Plan by including the Comprehensive Stormwater Drainage Plan as attached Exhibit C.

Section VIII

This ordinance shall take force and be in effect five (5) days from and after its publication according to law.

PASSED BY the Council and APPROVED by the Mayor this _____ day of September 2013.

SIGNED:_____
Mayor

ATTEST:_____
Clerk

APPROVED as to form:

_____
City Attorney

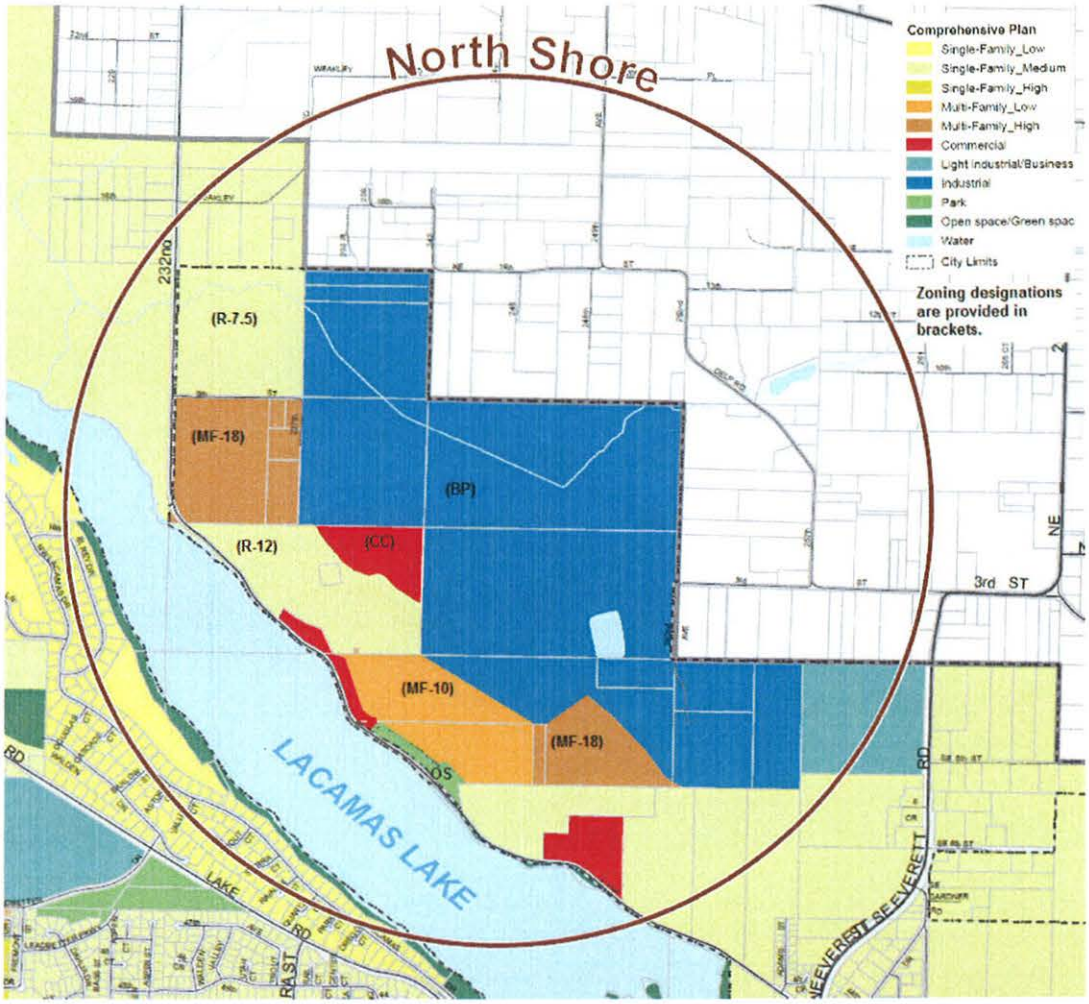
Ordinance No. 2678

Table 1- 2013 Comprehensive Plan Amendments

Comprehensive Plan Designations by Area	Zoning District	Acres (approx.)
Daley, MacDonald, and Mackay		**28.19**
Industrial	BP	28.19
North Dwyer Creek		**157.73**
Industrial	BP	92.61
Multi-Family Low	MF-10	44.23
Single-Family Low	R-15	20.89
North Shore		**460.33**
Commercial	CC	4.48
Industrial	BP	314.77
Multi-Family High	MF-18	59.86
Multi-Family Low	MF-10	35.62
Single-Family Medium	R-7.5	40
Open Space	OS	5.6
Rose Property		**54.45**
Single-Family Med	R-12	44.45
Commercial	CC	10

Ordinance No. 2678

Exhibit A – <u>North Shore Map</u> (draft)



Ordinance No. 2678

Exhibit B- <u>North Dwyer Creek Master Plan area</u> (draft)

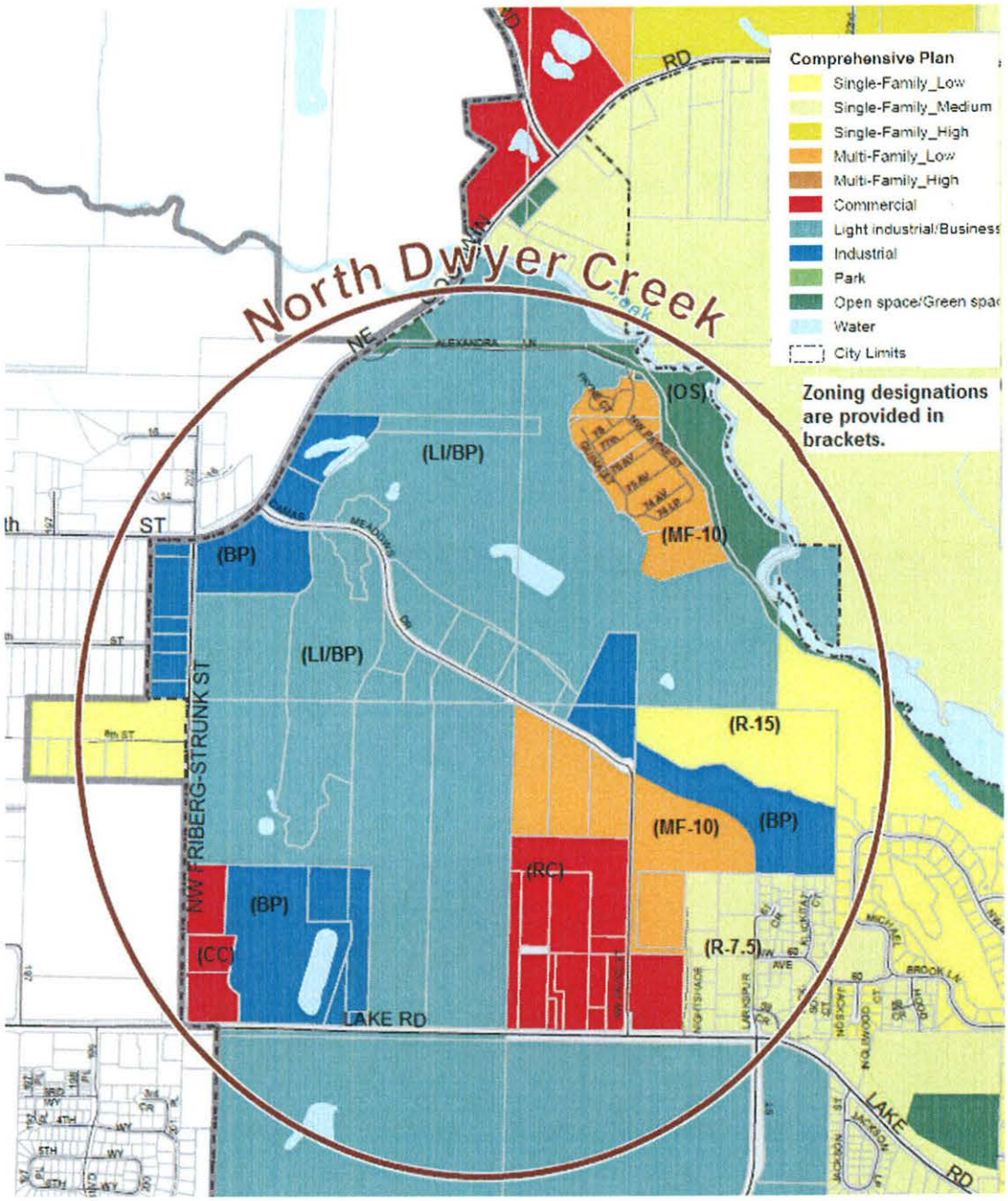
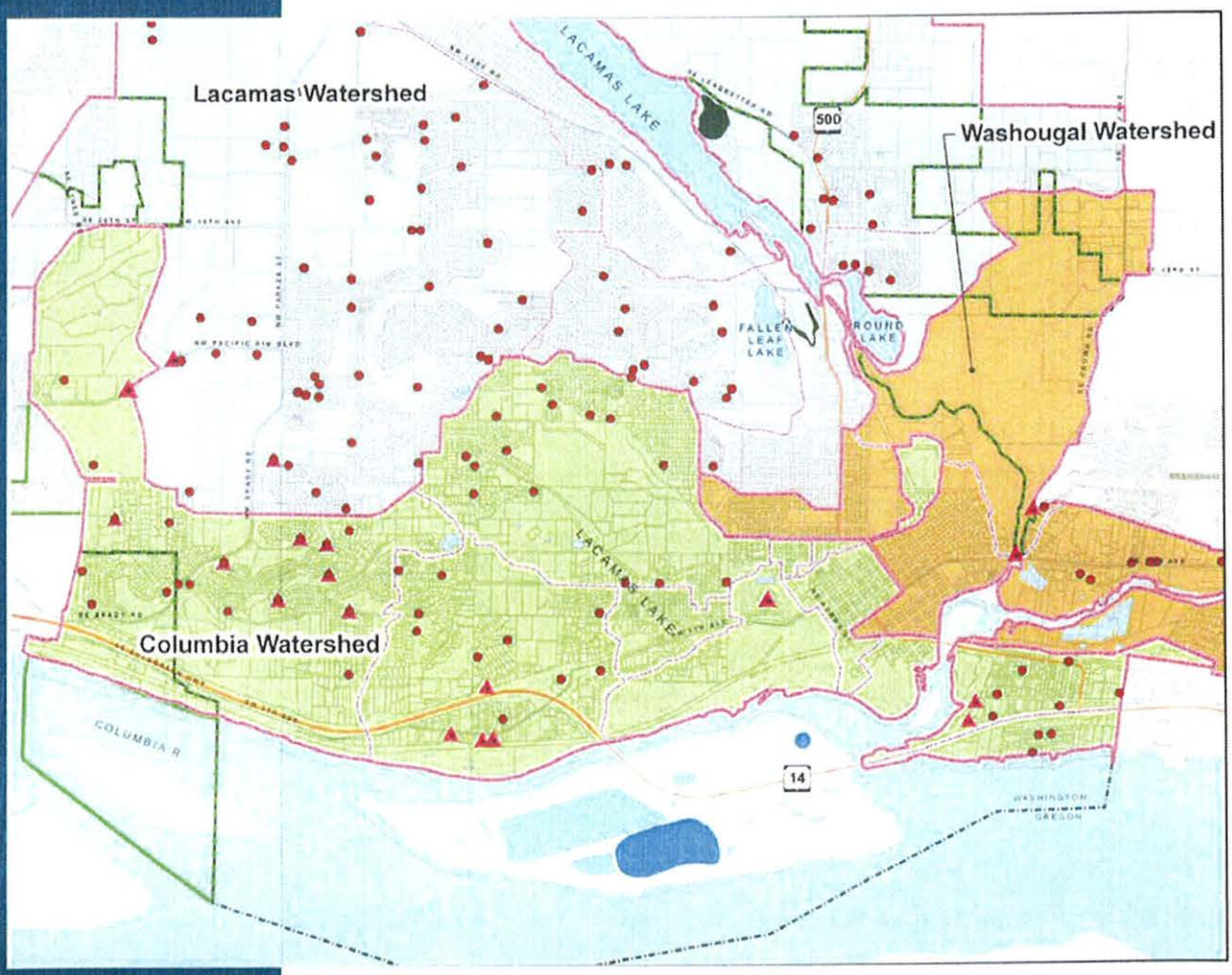


Exhibit C- Comprehensive Stormwater Drainage Plan

Comprehensive Stormwater Drainage Plan

April 2013



City of Camas
WASHINGTON

City of Camas

Comprehensive Stormwater Drainage Plan

Submitted to:

City of Camas, Washington

616 NE Fourth Avenue

Camas, WA 98607

Prepared by:

Otak, Inc.

700 Washington Street, Suite 401

Vancouver, WA 98660

Otak Project No.16060

April 2013

Table of Contents

Table of Contents

Continued

Table of Contents
Continued

Appendices

Table of Figures

Table of Contents

Continued

Table of Tables

Abbreviations and Acronyms

303(d) List	An EPA-mandated listing of streams that do not meet water quality standards. It includes the contaminant type and source, stream segment length, and other information.
BMP	Best Management Practice: A Best Management Practice is an activity, device, or structure that serves as a means of reducing or eliminating the generation of pollution or the movement of pollution towards stream, rivers, and lakes.
CIP	Capital Improvement Project or Capital Improvement Plan
Collection and conveyance system	means the drainage facilities, both natural and man-made, which collect, contain, and provide for the flow of surface and stormwater to a receiving water or infiltration facility. The natural elements of the conveyance system include, but are not limited to, small drainage courses, streams, rivers, lakes, and wetlands. The human-made elements of the collection and conveyance system include, but are not limited to, gutters, inlets, ditches, pipes, channels, and retention/detention facilities.
CWA	Clean Water Act
DMA	Designated Management Agencies
Detention	To hold runoff in a basin (pond) for a short period of time, thereby delaying the introduction of its volume (quantity) of stormwater to the neighboring stream.
Ecology	Washington State Department of Ecology
EIA	Effective Impervious Area: Refers to impervious area that is directly connected to a collection system, as opposed to running across grass or some other type of pervious system before entering the collection system.
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESC Plan	Erosion and Sediment Control Plan

Abbreviations and Acronyms
Continued

Flood Control Facility	A detention, retention or other storage facility that reduces the flow rate of stormwater runoff and retains and releases storage volumes.
Flood Plain	The land bordering a stream subject to inundation when the stream is at flood stage.
Flow Control Exempt	Large water bodies shown in Appendix I-E of the 2012 Stormwater Management Manual for Western Washington are exempt from Minimum Requirement 7.
FTE	Full-time Equivalent Employee
Ground Water	The water under the surface of the earth that is found within the pore spaces and cracks between the particles of soil, sand, gravel and bedrock.
Hydraulic Connectivity	Similar to EIA, where runoff from impervious surfaces are directly connected to a collection system. Reducing Hydraulic connectivity refers to discharging stormwater to pervious areas rather than a collection system.
IDDE	Illicit Discharge and Detection Elimination Program
Illicit Discharges	Any discharge to a storm sewer that is not composed entirely of stormwater and is not allowed per the NPDES permit and C.M.C. 14.04
Injection Well	Means a "well" into which "fluids" are being injected.
LEED	Leadership in Energy and Environmental Design.
LID	Low Impact Development
MS4	Municipal Separate Storm Sewer System: The Municipal Separate Storm Sewer System is an EPA-mandated program that requires municipalities to initiate activities to reduce its quantity and improve its quality of stormwater.
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries Services
NOAA	National Oceanic and Atmospheric Administration

Abbreviations and Acronyms
Continued

NPDES	National Pollutant Discharge Elimination System: A permit required from EPA for the discharge of stormwater into rivers, streams, and lakes. It is the permit that governs the activities under the MS4 program.
NRCS	Natural Resource Conservation Service
Non-Point Source	Water pollution that does not come from a specific pipe, but is derived from stormwater runoff and flows to streams, rivers, and lakes directly from adjacent properties.
NUGA	North Urban Growth Area
Non–Structural BMP	A BMP that does not include the use of a structural device, such as public education.
O & M	Operations and Maintenance
Point Source	Water pollution that is released from a specific pipe into a stream, river, or lake.
SDC	System Development Charges
SEPA	State Environmental Policy Act
SFHA	Special Flood Hazard Areas
SMMWW	The 2012 Stormwater Management Manual for Western Washington, prepared by the Washington State Department of Ecology.
Storm Sewer	A system of below-ground pipes that convey stormwater to its discharge point.
Stormwater	Stormwater is rainwater that accumulates on land as a result of storms and runoff from urban areas such as roads and roofs.
Structural BMP	A BMP that involves the use of a structure, such as a vegetated filter strip or catch basin with sump.
Surface Water	Surface water includes stormwater, and water in a stream, river, lake, wetland, or ocean.
SWMP	Stormwater Master Plan

Abbreviations and Acronyms
Continued

SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load: Total maximum daily load is a measurement of the maximum concentration of a specific contaminant possible in stream water without causing harm to the stream.
TSS	Total Suspended Solids
UIC	Underground Injection Control: means the Underground Injection Control program under Part C of the Safe Drinking Water Act, which regulates injection wells.
Waters of the State	Includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which includes lakes rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington.
WLA	Wasteload Allocation
WQ	Water Quality

Section 1—Introduction

1.1 Introduction

As with many communities across the country, the City of Camas is facing the challenge of balancing growth and development with quality of life and environmental stewardship. Recent information regarding the impact of urban stormwater on the environment has prompted new regulations, including National Pollutant Discharge Elimination System (NPDES) permitting, Underground Injection Control (UIC) regulations, and the Endangered Species Act (ESA). These regulations have forced jurisdictions to fund ever-expanding stormwater programs. And, the implementation of water quality and flow control regulations finds jurisdictions with a need to manage and maintain an ever larger list of stormwater infrastructure components.

As with all utilities, stormwater infrastructure requires routine inspection and maintenance. Some pipelines in the downtown core are well over 70-years old, and repairs become more frequent to properly maintain these assets. Some stormwater facilities such as detention ponds and biofiltration swales have been in place for 20 years or more, and these facilities require routine maintenance and repairs such as re-grading and landscaping, fencing replacements, access road upkeep, or structural repairs.

The City's NPDES stormwater discharge permit with the Washington State Department of Ecology (Ecology) continues to consume more of the City's resources. Retrofit programs, monitoring, mapping, record-keeping and reporting, illicit discharge and detection, public education and outreach, and the myriad of other requirements takes more staff time and requires more capital projects to stay in compliance.

The current stormwater utility rate does not include a large capital. Financial Consulting Solutions Group (FCSG) conducted a rate study in 2009, and this study set the storm rate to recover the cost of basic operation and maintenance of the existing storm system and modest amounts for replacement of existing infrastructure. As part of the Fisher Basin Utility, some capital dollars have been available but that account has been depleted. To provide a secure long term capital fund, the FSCG study proposed implementation of a System Development Charge (SDC) with a methodology consistent with the current water and sewer SDC. The rate would capture both historical costs and future capital needs. Prior to considering an SDC the City is required to adopt a basis for the SDC.

For these reasons and others, the City proposes to develop a stormwater capital improvement program similar to those for their transportation, water, and wastewater systems. These well-established programs are used for developing, implementing, and funding projects necessary for the ongoing maintenance, repair, and upgrade of existing assets, and for the planning and construction of new facilities. This plan will provide the basis for the future capital component of a SDC.

Section 1—Introduction

Continued

This inaugural CIP provides a capital program list that can be used to plan and fund stormwater maintenance activities, retrofits, repairs, and new facilities to serve existing and new development. This list can be used to develop a six-year capital plan similar to other city infrastructure programs. The intent of this inaugural plan is to identify an initial list of maintenance and capital improvement projects necessary to adequately care for the city's stormwater infrastructure. This plan includes the following components:

- Section Two: A discussion of stormwater regulations that the city follows.
- Section Three: A discussion of the study area (City limits plus urban growth area) characteristics that influence stormwater management.
- Section Four: A discussion of future development potential and how the City's stormwater ordinance may be met with the future development.
- Section Five: A list of capital projects identified for correcting deficiencies with existing facilities or identifying future capital improvement needs.
- Section Six: A description of the City's stormwater funding through their stormwater utility. Future editions to this plan will include a plan to meet the City's ongoing funding needs for stormwater infrastructure.

1.2 Plan Goals

The City has initiated the development of a Capital Improvement Plan as part of their structured approach for implementing stormwater programs and projects, and maintaining the City's existing stormwater assets. This plan seeks to align itself with and ascribe to the goals of the City's mission statement:

> *The City of Camas commits to preserving its heritage, sustaining and enhancing a high quality of life for all its citizens and developing the community to meet the challenges of the future. We take pride in preserving a healthful environment while promoting economic growth. We encourage citizens to participate in government and community, assisting the city in its efforts to provide quality services consistent with their desires and needs.*

This mission statement describes the City's commitment to protecting the environment and quality of life for its citizens, while promoting economic development to maintain vitality in the urban area. With that in mind, the following goals have been developed for this stormwater capital program:

- Create a program for stormwater management that replicates capital programs for the City's other infrastructure systems and allows for capital program planning and funding.
- Develop a program that allows for adequate funding of stormwater projects that supports the City's transportation infrastructure program.

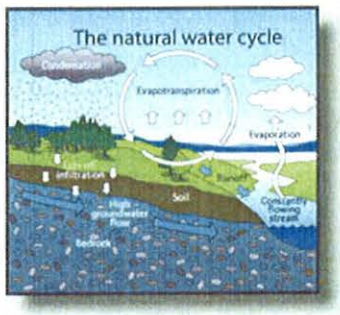
- Provide stormwater management in a way that is consistent with the City's mission statement in regard to environmental protection and economic development.

Figure 1-1 provides a discussion of stormwater runoff and how land use affects both the quantity and quality of the runoff. As this water is what feeds our creeks and streams, it has a direct affect on the quality of aquatic habitat. This discussion provides information on the framework from which stormwater management tools are developed.

The Importance of Stormwater Management

The Water Cycle

The earth's water continuously circulates between the atmosphere to the land in the forms of evapotranspiration (from earth to atmosphere) and rainfall where it becomes surface water and infiltrates into the soil to become groundwater. This is called the water cycle, or hydrologic cycle, and is key to understanding stormwater impacts.



In natural (undeveloped) conditions, rainfall infiltrates slowly into the ground. Natural biologic processes cleanse the water as it moves through vegetation and soil and into groundwater. Because most rainstorms are not large enough to fully saturate the soil, only a small percentage of rainwater flows over the surface as runoff. What does become runoff usually travels in a slow, meandering pace. Particles and sediments settle out along the way, ridding the water of impurities before it flows into rivers and streams.

The Effects of Development

Development drastically alters part of the natural water cycle. Impervious surfaces such as buildings and roads prevent rain from soaking into the ground. There is also less vegetation to soak up, store, and evaporate water. In addition, the natural soil structure is lost as a result of grading and compaction during construction. As a result, stormwater runoff greatly increases, flowing over land surfaces or through conveyance systems (such as pipes and ditches) into rivers and streams.

This alteration of the water cycle can have significant negative effects on surface water and groundwater, causing harm to fish and wildlife, drinking water supplies, property, recreation, and other beneficial uses.

- Increased runoff volume and speed may cause flooding and erosion and impairment of natural habitat in rivers and streams.
- Because less water infiltrates into the ground, less groundwater recharge may occur. This can reduce drinking water and irrigation supplies and may also reduce base flows in streams, which can be detrimental to fish and aquatic organisms.
- Developed surfaces retain heat, which increases runoff temperature during warm weather. This in turn may raise the temperature of the receiving waters, with potential negative impacts on aquatic life.
- Stormwater runoff picks up oil, fertilizers, pesticides, metals, chemicals, sediments, bacteria, debris, and other pollutants and may carry them into rivers and streams.

Mitigation through Stormwater Management

Stormwater management goals are intended to mitigate stormwater impacts created by typical development practices so new development and redevelopment maintain a better balance with the natural water cycle. This is achieved through the following approaches.

- Source control best management practices (BMPs) prevent stormwater from coming into contact with pollutants in the first place. Examples include sweeping instead of using water to clean an outdoor area and minimizing the use of chemicals for yard care. Source control BMPs are a cost-effective means of reducing pollutants in stormwater and should be a first consideration in all projects.
- Treatment BMPs reduce pollutant loads and concentrations in stormwater runoff through physical, biological, and chemical removal mechanisms. Examples include biofiltration, dispersion, constructed wetlands, and proprietary filter systems. These BMPs may accomplish significant levels of pollutant load reductions if properly designed and maintained.
- Flow control BMPs detain, retain, or infiltrate stormwater runoff to control the flow rate, frequency, duration, and volume of runoff leaving the site. Examples include detention ponds, infiltration systems, and constructed wetlands.
- Low impact development approaches emphasize capturing, treating, and infiltrating stormwater at the source. Techniques are used that mimic natural processes by allowing stormwater to slowly soak into the ground or filter through vegetation—for example, porous pavement, rain gardens, infiltration planters, and green roofs. Design and construction methods that preserve and take advantage of the site's natural features, such as open spaces, native vegetation, natural depressions, and wetlands are also considered LIDA. This approach provides multiple environmental, aesthetic, and cost benefits in addition to stormwater management.

Figure 1-1: The Importance of Stormwater Management (Courtesy of Clark County)

1.3 Previous Studies

The City has conducted stormwater studies to address specific problems or to provide master plans for specific areas. This Capital Improvement Plan includes a review of these past reports to identify opportunities for implementing projects developed with those studies. The key plans and studies are listed in Table 1.1.

Table 1.1: Past Stormwater and Drainage Studies

Study Name (City Job No.)	Date Published	Author
Fisher Basin Sub-area Plan (S-253)	Early 1990's	Parametrix, Inc.
North Dwyer Creek Master Plan (S-370)	October 1998	David Evans and Associates
Technical Memorandum for Long-Term Assessment of North Dwyer Creek (S-370)	February 2001	David Evans and Associates
Fisher Basin Stormwater and Wetlands Master Plan, Phase 1 (S-370)	July 2001	David Evans and Associates
Lacamas Lake: Nutrient Loading and In-lake Conditions (NA)	April 2004	Clark County
Fisher Basin Hydrologic and Hydraulic Analysis (S-456)	October 2005	Maul, Foster, and Alongi
Monitoring Report Lacamas Lake Annual Date Summary for 2007(NA)	2007	Clark County

Section 2—Regulatory Environment

2.1 Introduction

The City of Camas is required to meet local, state and federal regulations applicable to its operations and activities. Environmental regulations that apply to the City are summarized in this section. While the primary focus of this CIP is stormwater, the impacted natural resources include surface waters and associated aquatic species and habitat as well as groundwater.

This section provides a description of each requirement with the majority of the narrative focusing on those regulations deemed to be the primary drivers that most influence City functions. Because it is a regulation that spans multiple environmental media, the State Environmental Policy Act (SEPA) is covered as an adjunct to other environmental regulations. Similar to SEPA, tribal input through the consultation and collaboration process spans multiple regulation and environmental media and is also an adjunct to the other listed regulations. Consequently, these two topics are treated separately and are discussed at the conclusion of this section.

2.2 The Clean Water Act (CWA)

The CWA is the primary federal law governing water pollution. The goal of the CWA is to eliminate releases of pollution into water and ensure that surface waters meet standards to protect fish, shellfish, wildlife and human health. Under the CWA, EPA has implemented pollution control programs including the National Pollutant Discharge Elimination System (NPDES) permit system which applies to industrial, municipal, and construction discharges to surface waters. In Washington State, EPA has delegated authority to administer the NDPES permit program to the Washington State Department of Ecology (Ecology). The NPDES Phase II Municipal Stormwater Permit applies to the City of Camas.

The CWA also regulates quality standards for surface waters and requires that water bodies not meeting standards be placed on the CWA section 303(d) list. Waters placed on the 303(d) list require the development of a water cleanup plan, also known as a Total Maximum Daily Load (TMDL). Following the issuance of a TMDL, NPDES permits are modified to include implementation of requirements to reduce pollutant loading.

The NPDES stormwater permit, standards, the 303(d) list and TMDLs and their applicability to the City are further described in the following sections.

Section 2—Regulatory Environment

Continued

2.2.1 NPDES Permit Description and Applicability

Phase II NPDES Municipal Stormwater Permit

NPDES Phase II permits, first issued in 1999, requires regulated small Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. Small MS4s are jurisdictions or agencies with populations under 100,000 that are not regulated by a Phase I program.

Small MS4s outside of a UA are required to obtain an NPDES permit if it is serving a jurisdiction with a population of at least 10,000 and a population density of at least 1,000 people per square mile.

Each regulated MS4 is required to develop and implement a stormwater management program (SWMP) to reduce the contamination of stormwater runoff and prohibit illicit discharges.

An MS4 is a conveyance or system of conveyances that is:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.;
- Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.);
- Not a combined sewer; and
- Not part of a Publicly Owned Treatment Works (sewage treatment plant).

NPDES Permit terms run for five years. The current Municipal permit was issued January 17, 2007, went into effect on February 16, 2007, was modified on June 12, 2009, and expired on February 15, 2012. A draft permit for the next permit term is currently undergoing review, and Ecology has extended coverage for the existing permit until the new permit is reissued.

Implementing the City's NPDES permit requires a Comprehensive Stormwater Management Program that includes:

- Mapping stormwater systems
- Educating employees and the public
- Detecting and eliminating illicit discharges
- Controlling stormwater runoff from new development, redevelopment and construction

- An operations and maintenance program
- Annual reporting

NPDES Stormwater Permit – Construction General

The NPDES Construction Stormwater General Permit was originally issued in 1995 and regulated sites with greater than five acres of disturbance. It was re-issued by Ecology November 16, 2005, where coverage changed from 5 acres down to one acre and reissued again on December 10, 2010.

In general, the permit regulates clearing, grading and/or excavation that results in the disturbance of one acre or more for sites that discharge stormwater to surface waters of the state. In some cases, smaller sites may be subject to the permit if Ecology determines the site to be a significant contributor of pollutants or expects discharges from the site could reasonably cause a violation of water quality standards.

The requirements of the Construction General Permit include:

- Compliance with applicable state water quality and sediment management standards
- Monitoring Requirements
- Reporting and Recordkeeping
- Solid and Liquid Waste Disposal
- Additional Restrictions for Discharges to 303(d) listed or TMDL Water bodies
- Stormwater Pollution Prevention Plan (SWPPP)

The permit requires monitoring for turbidity and in certain cases for pH. When benchmark values for these constituents are exceeded, the SWPPP must be revised as needed, source control and treatment BMPs must be implemented, and all activities documented in the site log book. In addition, Ecology must be notified by phone and daily sampling continued until constituent levels are reduced to acceptable levels. Any discharges to TMDL or 303(d)-listed waters that exceed numerical effluent limits for turbidity and pH constitute a violation of the permit.

The Construction Permit applies to:

- land disturbing operations that disturb one or more acres, or
- Sites that are part of a larger common plan of development or sale that disturb less than one acre of total land area if the larger common plan will ultimately disturb one or more acres.

Section 2—Regulatory Environment

Continued

2.2.2 303(d) List and TMDLs

303(d) List

Under Section 303(d) of the CWA, states are required to prepare a list of surface waters where beneficial uses have been impaired. These beneficial uses include industrial use, aquatic habitat, drinking water, and recreation. In Washington State, Ecology conducts biennial water quality assessments to determine whether surface waters are meeting state surface water quality standards. Ecology's assessment of which surface waters are placed on the 303(d) list is guided by federal laws, state water quality standards, and the Policy on the Washington State Water Quality Assessment. This water quality policy describes how the standards are applied, requirements for the data used, and how to prioritize TMDLs. The goal of the policy is to provide a guide for selecting which surface water is impaired by pollutants and how severely.

The 303(d) List represents polluted waters that require the development of a water quality improvement project or TMDL. A TMDL is the amount of pollutant loading that a given water body can receive and still meet water quality standards established to protect beneficial uses.

The Environmental Protection Agency (EPA) approved Washington's current water quality assessment and 303(d) list on January 29, 2009. In Camas, the water bodies and constituents include the following:

- Lacamas Creek (dissolved oxygen, temperature, bacteria and pH)
- Lacamas Lake (total phosphorous)
- Washougal River (fecal coliform)
- Dwyer Creek (dissolved oxygen)
- Lower Columbia River (temperature, total dissolved gas, dioxin)

Ecology expects to submit a new Freshwater Assessment and 303(d) list to the EPA for approval during the winter of 2012-2013.

TMDLs

Currently, the City has not been identified as a party with implementation responsibilities under any existing TMDLs. A new TMDL is currently under development by Ecology associated with the listings for Lacamas Creek on the current 303(d) List. Ecology's TMDL prioritization and scheduling process is a five-step, five-year process that includes public notice, public involvement, scoping, data collection and analysis, action plan development and implementation. Implementation requirements are included in NPDES waste discharge permits when issued or through permit modifications.

Under RCW 90.48 – Water Pollution Control, and in the absence of an established TMDL, Ecology has the authority to condition the Construction Stormwater General Permit with additional requirements to control discharge of pollutants to impaired water bodies listed on the 303(d) list.

2.3 The Safe Drinking Water Act (SDWA)

The SDWA is the primary federal law governing protection of drinking water and applies to all public water systems. Under the SDWA, the EPA has established National Primary Drinking Water Regulations that set standards for maximum contaminant levels to ensure drinking water quality. The SDWA also authorizes the EPA to regulate injection wells to protect underground drinking water supplies.

2.3.1 Underground Injection Control (UIC) Rule

To satisfy the intent and requirements of the SDWA and the Washington State Water Pollution Control Act, chapter 90.48 RCW, the Washington State Legislature adopted the UIC Program, chapter 173-218 WAC. Under this program UICs used for stormwater discharge and/or treatment are considered Class V UICs.

Class V injection wells are usually shallow injection wells that inject fluids above the uppermost groundwater aquifer. Some examples include dry wells, french drains used to manage stormwater, and drain fields. Examples of Class V injection wells that are allowed in Washington, and relate to stormwater, include drywells and infiltration trenches used to drain stormwater runoff into the ground surface.

All Class V injection wells must be registered with Ecology, except wells receiving residential roof runoff from a single family home or to control basement flooding at single family homes (including duplexes). These wells are exempt from the registration requirements.

To provide clarification on which stormwater infiltration techniques meet the Class V well definition, the Department of Ecology's UIC website includes a memorandum from the EPA which identifies specific infiltration practices/technologies and discusses whether or not they are constitute a Class V well (Boornazian, & Heare, 2008). The guidance information provided in the EPA memorandum is summarized in Table 2.1.

Table 2.1: Class V Well Identification Guide From EPA	
Infiltration Practice/Technology	**Considered a Class V Well?**
Rain Gardens & Bioretention Facilities	No.
Vegetated Swales	No.
Pocket Wetlands & Stormwater Wetlands	No.
Vegetated Landscaping	No.
Vegetated Buffers	No.
Tree Boxes & Planter Boxes	No.
Permeable Pavement	No.
Reforestation	No.
Downspout Disconnection	No – typically these are downspouts are redirected from sewers to permeable surfaces where runoff can infiltrate.
Infiltration Trenches	Yes – when they include an assemblage of perforated pipes, or are deeper than their widest surface dimension.
Commercially Manufactured Stormwater Infiltration Devices	Yes.- typically these constitute a subsurface fluid distribution system.
Drywells, Seepage Pits, Improved Sinkholes	Yes – typically these are deeper than their widest surface dimension.

The governing EPA criteria used to make the determinations in Table 2.1 includes:

- A Class V has a sub-surface distribution system
- A Class V well is a hole that is deeper than its widest surface dimension

If either one of these criteria apply to a particular stormwater infiltration practice or technology, then it would be considered a Class V well and would be subject to UIC regulations.

The following summary from Ecology's December 2006 *Guidance for UIC Wells that Manage Stormwater* speaks to the requirements for existing UIC wells and requirements for municipalities with NPDES stormwater permits.

Existing UIC Wells

UIC wells constructed before February 3, 2006 are considered by Ecology to be "existing" wells and have different requirements than wells constructed after.

Existing UIC wells must be registered with Ecology, except for wells receiving residential roof runoff from a single family home or to control basement flooding at single family homes (including duplexes).

An assessment of existing wells must be completed to determine if the existing UIC wells are a high threat to ground water. UIC wells that are high threat to ground water must be retrofitted to protect ground water quality.

New UIC Wells

UIC wells constructed after February 3, 2006 are considered by Ecology to be "new" wells and must meet Ecology's Non-endangerment standard. This can be done through the presumptive approach (following the guidelines in Ecology 2006, or through the demonstrative approach, where evidence is provided that the non-endangerment standard is met.

Requirements for Municipalities with NPDES Stormwater Permits

Municipalities that are under an NPDES stormwater permit may also have stormwater discharges to UIC wells. The Stormwater Management Program required by the NPDES stormwater permit includes best management practices that also may be applied to stormwater discharges to UIC wells. To avoid duplication, municipalities that are under an NPDES stormwater permit may meet UIC program requirements by applying their Stormwater Management Program to areas served by UIC wells. See Chapter 173-218-090(2) WAC.

Since the NPDES permit does not fulfill all the requirements of the UIC Program, the following must be added to the Stormwater Management Program (SWMP) and implemented:

- UIC wells must be registered
- New UIC wells must be constructed according to the specifications in this guidance
- A well assessment must be completed for all existing UIC wells
- Existing UIC wells that are determined to be a high threat to ground water must be retrofitted

More information on these procedures can be found in Ecology (2006).

Section 2—Regulatory Environment

Continued

2.4 Endangered Species Act (ESA)

The purpose of the federal ESA is to protect species and the ecosystems upon which they depend. Two primary goals of the ESA are to prevent the extinction of endangered plant and animal life and their critical habitats, and to pursue survival and recovery of these populations. It is administered by two agencies, the U.S. Fish and Wildlife (USFWS) (freshwater fish and all other species) and the National Oceanic and Atmospheric Administration (NOAA) (marine species). The ESA prohibits any "take" of species listed as endangered. "Take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect. In 1999, 12 groups of Pacific Northwest salmon and several populations of bull trout were listed as threatened or endangered under the ESA, and in July 2000, NOAA NMFS adopted a rule governing the "take" of 14 groups of salmon and steelhead listed as threatened under the ESA.

Salmon Recovery

The ESA and Washington State law require development of plans to recover salmon. The Governor's Salmon Recovery Office was established by the Legislature to coordinate a statewide salmon recovery strategy.

The Lower Columbia Fish Recovery Board (LCFRB) is charged with coordinating salmon recovery in the lower Columbia River basin, including Camas. They have developed and documented a plan to support salmon recovery for Willamette/Lower Columbia River Evolutionary Significant Units (ESU) in Washington.

The City of Camas, along with other members of the Planning Unit, unanimously approved the plan developed by the LCFRB on December 13, 2004. The Watershed Management Plan was adopted by the parent counties of Clark, Cowlitz and Skamania counties on July 21, 2006. Detailed implementation planning was completed in June of 2008. Each implementing entity documents its commitment and approach to implementing specific actions in its Six-Year Implementation Work Schedule that addresses recovery plan and watershed plan actions. Camas is currently implementing actions and tracking its activities in a web-based data system called Salmon PORT accessed from the LCFRB website.

2.5 City of Camas Municipal Code Requirements

There are currently five sections of the City of Camas Municipal Code (CMC) that pertain to stormwater management and pollution prevention: Stormwater Drainage Utility, CMC 13.88; Stormwater Utility Service Charges, CMC 13.89; Stormwater Control, CMC 14.02; Illicit Discharge, Dumping and Illicit Connections, CMC 14.04; and Erosion and Sediment Control, CMC 14.06. These ordinances are discussed in detail below.

CMC Chapter 14.02 – Stormwater Control

This chapter applies to new development and redevelopment and includes requirements that address the following topics:

- Reducing and preventing stormwater pollution during construction
- Reducing the introduction of pollutants into surface water runoff
- Installing flow control and/or stormwater treatment facilities, depending on size and the character of the project, and implementing low impact development practices

This chapter also sets minimum standards consistent with Ecology's Stormwater Management Manual for Western Washington as modified by the City's Stormwater Design Standards Manual.

CMC 14.04 Illicit Discharges, Dumping and Illicit Connections

This chapter applies to all new and existing development, public and private. It defines prohibited, allowable, and conditional discharges to the municipal storm drain system, and/or surface and ground waters. It further prohibits illicit connections to the municipal storm drain system.

CMC 14.06 Erosion and Sediment Control

This chapter applies to any person undertaking any land-disturbing activity, with the exception of small parcel development which is regulated under the small parcel requirements of Chapter 3.03 of the City's Stormwater Design Standards Manual. Requirements include the development and implementation of an Erosion Prevention and Sediment Control Plan as well as the development and implementation of a Stormwater Pollution Prevention Plan for sites one acre or larger meeting certain criteria. Best management practices must be applied to the site and be maintained to prevent sediment from leaving the site.

CMC 13.88 Stormwater Drainage Utility/CMC 13.89 Stormwater Utility Services Charges

These chapters define the creation of the city-wide stormwater drainage utility, the creation of the stormwater drainage utility fund, and the rate structure and fee charged for the stormwater utility. See Section 6 for more information.

2.6 Growth Management Act (GMA)

The Washington State GMA was adopted in 1990 in response to concerns about unplanned and uncoordinated growth posing threats to the environment, sustainable economic development, and the quality of life in the state. The GMA requires state and local government to manage the state's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing comprehensive plans and

implementing them through capital investment and development regulations.

Critical Areas Ordinances

The GMA identified five critical areas that each city and county in Washington State must identify, designate and protect:

- Wetlands (CMC 16.53)
- Areas with critical recharging effect on aquifers used for potable water(CMC 16.55)
- Frequently flooded areas(CMC 16.57)
- Geologically hazardous areas(CMC 16.59)
- Fish and wildlife habitat conservation areas(CMC 16.61)

Approaches to critical areas protection can incorporate both regulatory and non-regulatory methods and involve a spectrum of strategies. These range from conservation policies, designation of open space and regulation of land uses that may impact critical areas. The City's activities are subject to the City's Critical Areas Ordinance's including those regulations that relate to habitat conservation and restoration.

2.7 Shoreline Management Act (SMA)

The Washington State SMA applies to the "shorelines" of Washington, which are defined as marine waters, most lakes, streams, rivers, shorelands, wetlands and floodplains. It also designates "shorelines of statewide significance" including all waters of Puget Sound and certain Puget Sound shorelines. The Act is administered by the Department of Ecology and addresses three basic policy areas: shoreline use, environmental protection and public access.

Under the SMA, all cities and counties with "shorelines" must develop and adopt a Shoreline Master Program (SMP), which according to Ecology is "essentially a shoreline-specific combined comprehensive plan, zoning ordinance, and development permit system." The City's activities, as applicable, are subject to the Camas SMP, including those that relate to habitat conservation and restoration.

2.8 State Environmental Policy Act (SEPA)

The SEPA provides a process for identifying and evaluating possible environmental impacts that may result from governmental decisions and conditioning proposals when adverse impacts are anticipated. The SEPA process applies to state and local agency decisions that relate to projects, such as private development projects or construction of public facilities, or non-projects, such as adopting regulations, policies or plans.

Proposals are reviewed by the "lead" agency (state, city or county) based on information

provided by the applicant, and environmental impacts are evaluated and documented in the areas of earth, air, water, plants, animals, energy, environment health, land use, transportation, public services and utilities. Following the review and evaluation, the lead agency will either issue a Determination of Non-significance (DNS), a Mitigated Determination of Non-significance (MDNS), or require the preparation of an Environmental Impact Statement (EIS). The DNS, MDNS and EIS can impose conditions on the proposal to address environmental impacts identified in the review and evaluation. These are tools used by the lead agency to provide information to all agencies that must approve the proposal. Proposals are rarely denied unless an EIS identifies likely significant environmental impact that cannot be mitigated to within acceptable limits.

2.9 Tribal Consultation and Collaboration

Pursuant to Federal Executive Order 13175 issued on November 6, 2000, executive departments and agencies of the federal government were charged with engaging in regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications. The EPA's Region 10 Tribal Consultation Framework defines consultation to mean "respectful, meaningful, and effective two-way communication that works toward a consensus reflecting the concerns of the affected federally recognized tribe(s) before making decisions or taking action.

In Washington State, the Centennial Accord was executed on April 4, 1989, slightly ahead of the federal Executive Order. The Accord between the State of Washington and the federally recognized Indian tribes of Washington "encourages and provides the foundation and framework for specific agreements among the parties outlining specific tasks to address or resolve specific issues." Under the Ecology Centennial Accord Implementation Plan, "Ecology is committed to government consultation with tribes on all actions and issues of interest to tribes under Ecology's statutory authority."

At the local level, the City of Camas provides opportunities for tribal input through the SEPA and archaeological review process.

Section 3—Study Area Characteristics

3.1 Introduction

This section describes the study area for this plan and the current and planned zoning for areas within the study area. It also discusses the physical characteristics that influence stormwater management, such as climate, topography, and soil types. Lastly, this section discusses characteristics of the existing storm drainage system.

3.2 Study Area

The study area for this Comprehensive Stormwater Drainage Plan includes the Camas city limits and its current urban growth area.

Camas's Urban Growth Area encompasses the City limits plus areas north and west of the City that will be annexed for future expansion. The current City limits consist of approximately 9,717 acres, while the unincorporated areas of the UGA are approximately 2,110 acres

The city limits and urban growth area are shown in Figure 3-1.

3.3 Land Use and Zoning

How land is developed can affect both the amount of runoff generated from a project and the quality of the stormwater as it leaves the site. Commercial and industrial areas tend to create more impervious area than residential sites. Depending upon the exact use type, industrial areas potentially generate more pollutants in runoff than residential areas and may require a different type of treatment. Therefore, understanding land use can help determine what regulatory and management measures should take place within a basin.

Camas currently has 36 different zoning categories. These different categories have been summarized into more general land types as shown in Table 3.1.

Table 3.1: Camas Land Use Zoning

Project Zoning Category	City Zoning Classification
Single-Family Residential	R-5, R-6, R-7.5, R-10, R-12, R-15, R-20, R1-6, R1-10, R1-20
Multifamily Residential	R-12, R-18, MR-10, MF-24
Commercial	BP, CC, DC, GC, NC, OC, RC, CH, CV, MX, RGX,
Industrial	HI, LI, LI/BP, ML, A

Table 3.1: Camas Land Use Zoning	
Project Zoning Category	City Zoning Classification
Agriculture	AG-20
Special Districts	P/OS, P/WL, FR-40

These areas are shown in Figure 3-2. The special districts within the City of Camas consist of parks and open space.

3.4 Physical Characteristics

The analysis and management of stormwater is influenced by physical characteristics of the watershed, such as precipitation amounts, soil types, level and type of development, and topography. This section provides a description of these and other characteristics that influence stormwater management.

3.4.1 Climate

The City receives an average of 51 inches of rain per year according to the National Oceanic and Atmospheric Administration data. December is historically the wettest month, and July the driest, with normal precipitation varying from 0.5 to 6.5 inches per month.

The average annual temperature is about 53 degrees Fahrenheit (°F), with a summer time average of 65 °F and a winter average of 40 °F.

3.4.2 Topography

The City of Camas is characterized by varied topography including the flatter areas downtown on the banks of the Columbia, the ridge of Prune Hill running east-west through the City just north of downtown, the low lands of Grass Valley northwest of Prune Hill, and the valleys and hills surrounding Lacamas Lake, including the North Urban Growth Area (NUGA) on the northeast side of the lake.

The elevation within the City ranges from about 20 feet above sea level along the shores of the Columbia and Washougal Rivers, to approximately 750 feet at the top of Prune Hill. Much of the development is centered on the downtown area, on Prune Hill where the slopes allow, and along the southwestern shore of Lacamas Lake. Currently, the top and bottom of Lacamas Lake, along with much of the northeastern shore, is forested. Grass Valley is a patchwork of homes, businesses, open grassland, and stands of trees.

Figure 3-3 shows contour elevations for the City.

3.4.3 Soils

The type of soil - granular, sandy, clayey, etc. has a strong influence on stormwater management, mostly in the determination of whether stormwater can be infiltrated or whether it needs to be detained and conveyed to a surface water body.

The majority of the soils within the City are classified by the Natural Resource Conservation Service (NRCS) as Hesson, Powell, Olympic Lauren, and Dollar. These soils are mostly poorly drained and consist of medium to moderately fine textured terrace soil. Figure 3-4 shows a map of the soil types in the city, as mapped by the NRCS.

Except for isolated pockets and areas of Hillsboro soils in the west part of the city, soil conditions are generally not favorable for infiltration of stormwater. For this reason most developments built since flow control has been required use detention systems and do not infiltrate stormwater. However, as most soils have some infiltration capacity, the City's stormwater ordinance (CMC 14.02) requires testing for infiltration and the use of infiltration where possible. Even if detention is necessary, infiltration through the detention pond will affect the size of the facility.

3.4.4 Geologic Hazard Areas

There are approximately 891 acres within the City that are classified as steep and unstable slopes. The southern slope of Prune Hill is either historically or potentially unstable. Slopes along the drainage ways coming down Prune Hill, to the north and east, are also potentially unstable. The hill slopes in the natural area draining to Lacamas Creek are also active and potentially unstable. Figure 3-5 maps known and potentially unstable slopes as noted in the City's Geographic Information System (GIS).

3.4.5 Flood Hazard Areas

Flood hazard areas are areas adjacent to lakes, rivers, and streams that are prone to flooding during peak runoff periods. Construction of buildings and other development in these areas is regulated in accordance with the City's floodplain ordinance. Figure 3-5 shows mapped floodplains in the Camas area.

3.4.6 Wetlands

Wetlands are defined by the EPA as areas that are inundated by surface or ground water at a frequency and duration sufficient to support vegetation adapted for saturated conditions. Wetlands support valuable and complex ecosystems and development is severely restricted, if not prohibited, in most wetlands.

Section 404 of the Clean Water Act regulates discharge of materials to wetlands and a permit from the Army Corps of Engineers is required for most activities that potentially impact wetlands. Wetlands within the City of Camas are generally adjacent to the Columbia River and Lacamas Lake and in the low flat lands of Grass Valley on the west side. Figure 3-5 shows wetlands as listed in the City's GIS.

3.4.7 Surface waters

Major water features within the City include the Columbia River, the Washougal River, Lacamas Lake, Lacamas Creek, Fallen Leaf Lake, and Round Lake.

The Columbia River begins in Canada, enters the United States in northeastern Washington, and travels southwest through Washington to the Pacific Ocean. The river exits the Columbia River Gorge shortly before it travels past downtown Camas.

The Washougal River flows southwest from the Cascade Mountains to the City of Camas, where it empties into the Columbia River.

Upper Lacamas Creek (above Lacamas Lake) receives flow from 5 tributaries, only one of which is within the city limits (Dwyer Creek). The other tributaries - China Ditch, Matney Creek, Shanghai Creek, and Fifth Plain Creek - enter Lacamas Creek in rural Clark County.

Lacamas Lake is a 2.4 mile long lake that receives runoff from the surrounding hills and flow from Lacamas Creek. It is connected to Round Lake by a channel that runs under State Route 500. The water level in Round Lake is controlled by a dam at the south end of the lake, which is run by Georgia Pacific Consumer Products LLC. Lacamas Lake has significant algal growth in the summer time, which can impair the water quality.

Lower Lacamas Creek, below Round Lake, travels down a steep slope and over waterfalls to its confluence with the Washougal River.

Numerous streams and creeks discharge from Prune Hill, including Blue Creek and Forest Home Creek on the south side, and Dwyer Creek on the north side. The Fisher Swale follows the west limits of the city as it heads south to the Columbia River. See Figure 3-6 for the location of these creeks.

3.5 Existing Storm Drainage System

The City owns and maintains a stormwater conveyance system that drains approximately 7,500 acres. This storm system includes approximately 75 miles of stormwater conveyance pipe and 1,800 stormwater inlets and catch basins. It also includes numerous culverts and drainage channels. All storm pipelines are separate from the City's sanitary sewer system.

The City has a long standing policy of requiring commercial and residential stormwater facilities to be privately owned and maintained. As part of its March 2010 stormwater code update the City retained this policy and codified it under CMC 14.02.200 Ownership and Maintenance.

The City estimates that there are 110 private stormwater facilities within its boundaries. Private facility maintenance inspection occurs primarily on a complaint-driven basis. However, the city's current NPDES permit requires that all private stormwater facilities built after February 2010 be inspected yearly by the City. The City is now responsible for annual inspections of private stormwater facilities and for ensuring that property owners maintain their facilities.

At the time of this report the City owns and maintains approximately 25 facilities, including underground treatment vaults, detention ponds, biofiltration swales, and wet ponds, drainage ditches, and culverts. A list of these facilities is included in Appendix A. It is important to note that 23 of the 25 facilities on this list were constructed before February 2010 and are therefore not subject to the NPDES inspection requirements in the city's current NPDES permit.

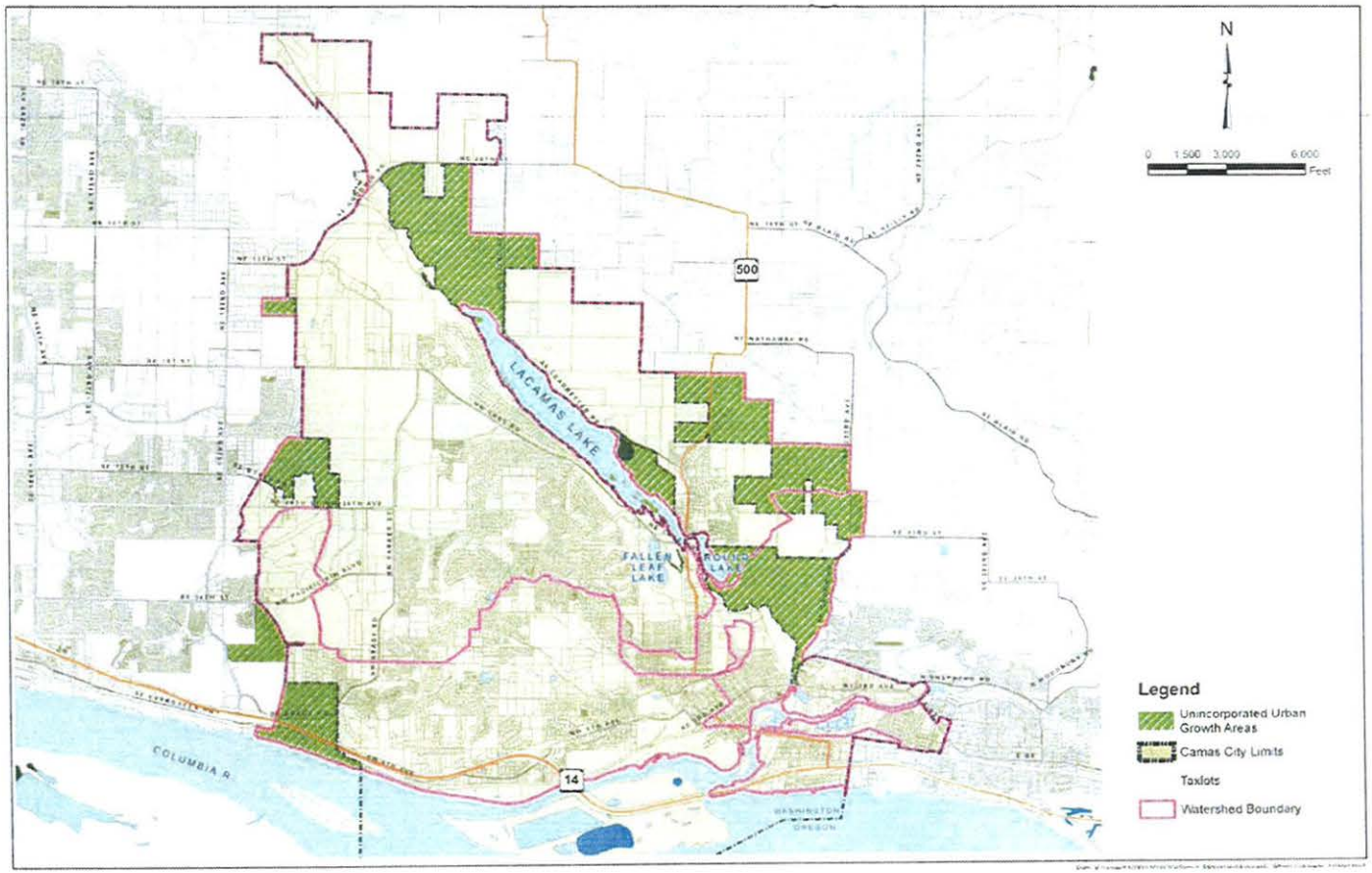


Figure 3-1: City Limits and UGA Boundaries

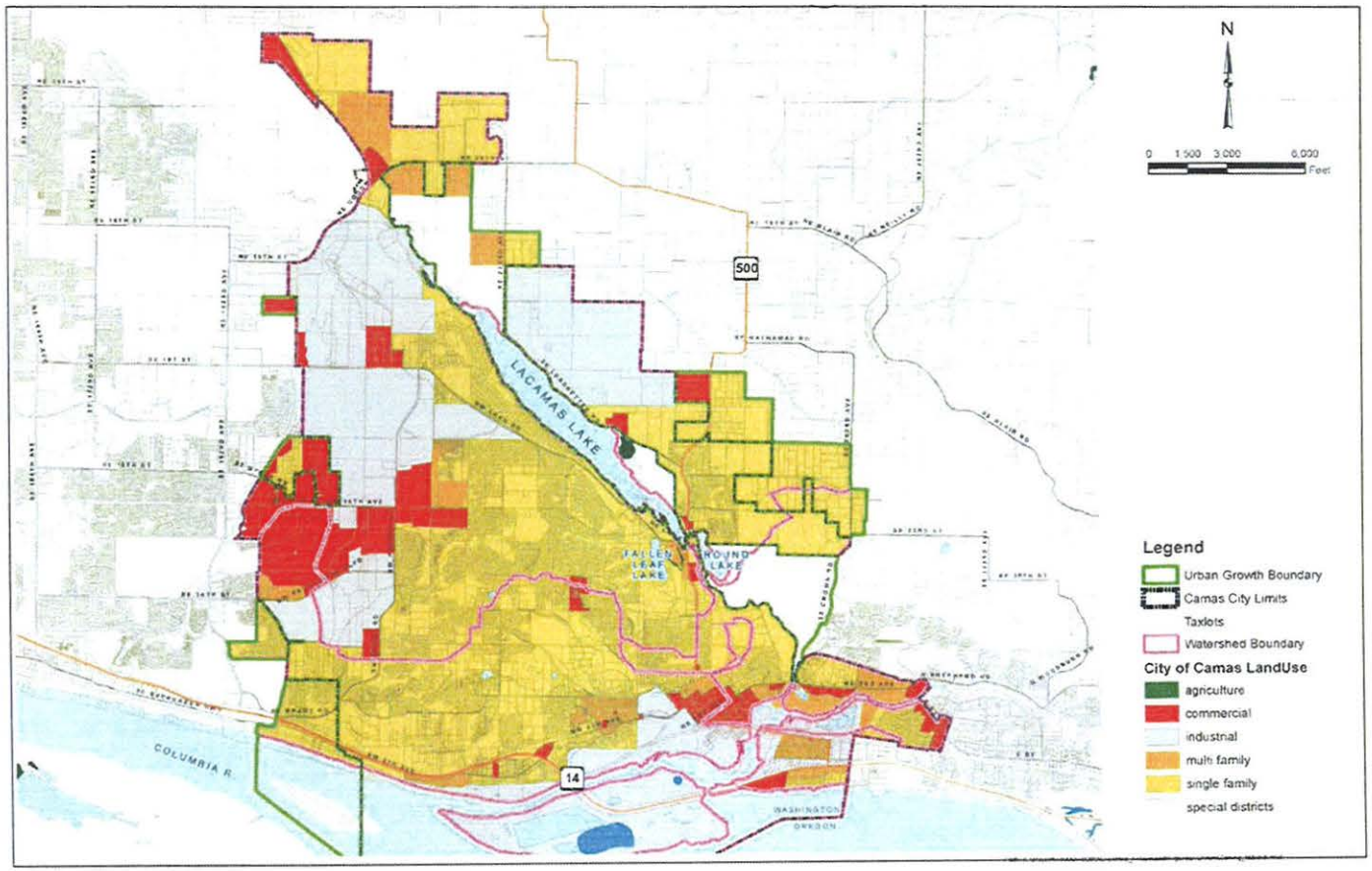


Figure 3-2: Current City Zoning

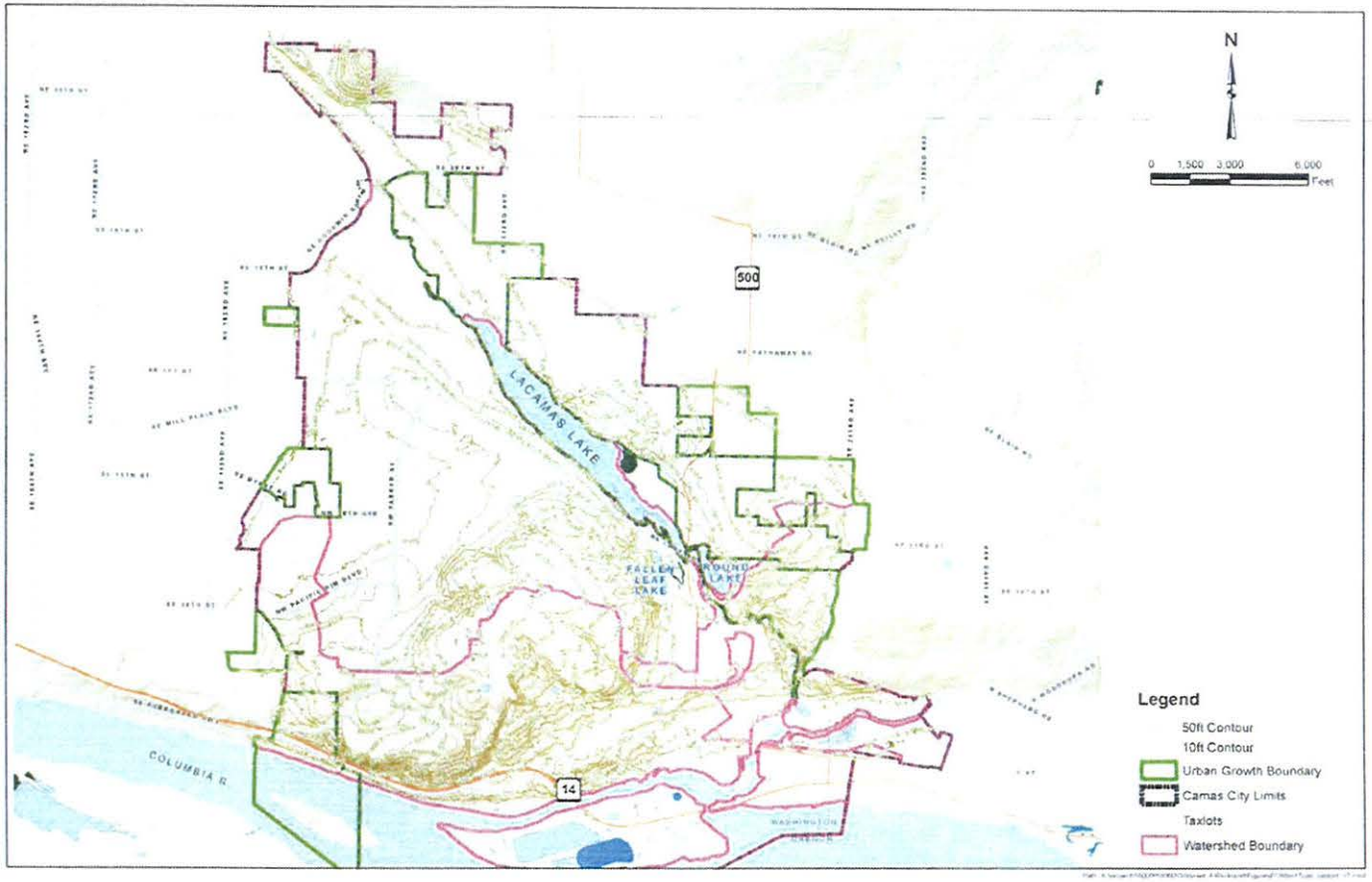


Figure 3-3: City Contour Map

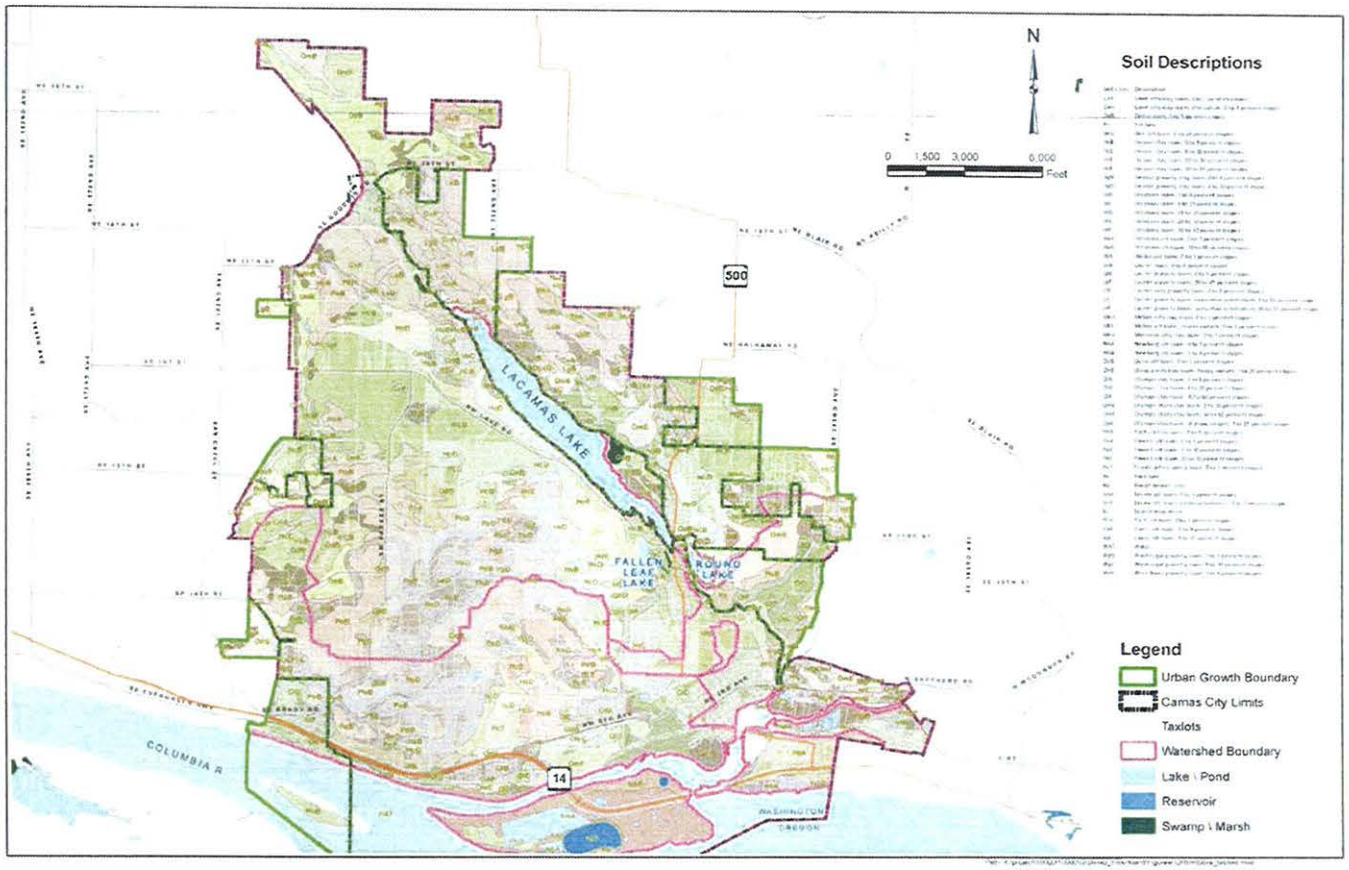


Figure 3-4: NRCS Soil Categories

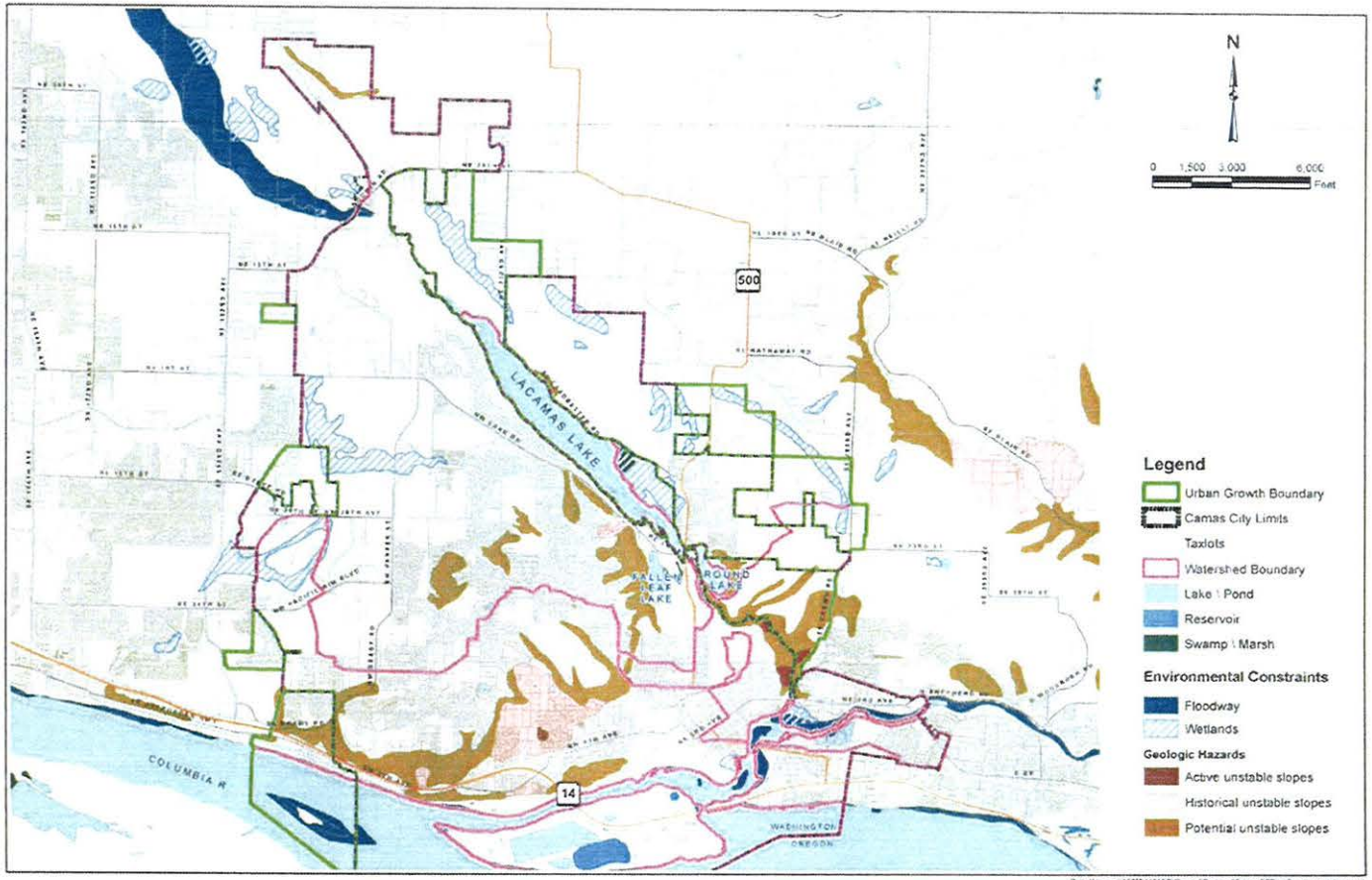


Figure 3-5: Environmental Constraints and Unstable Slopes

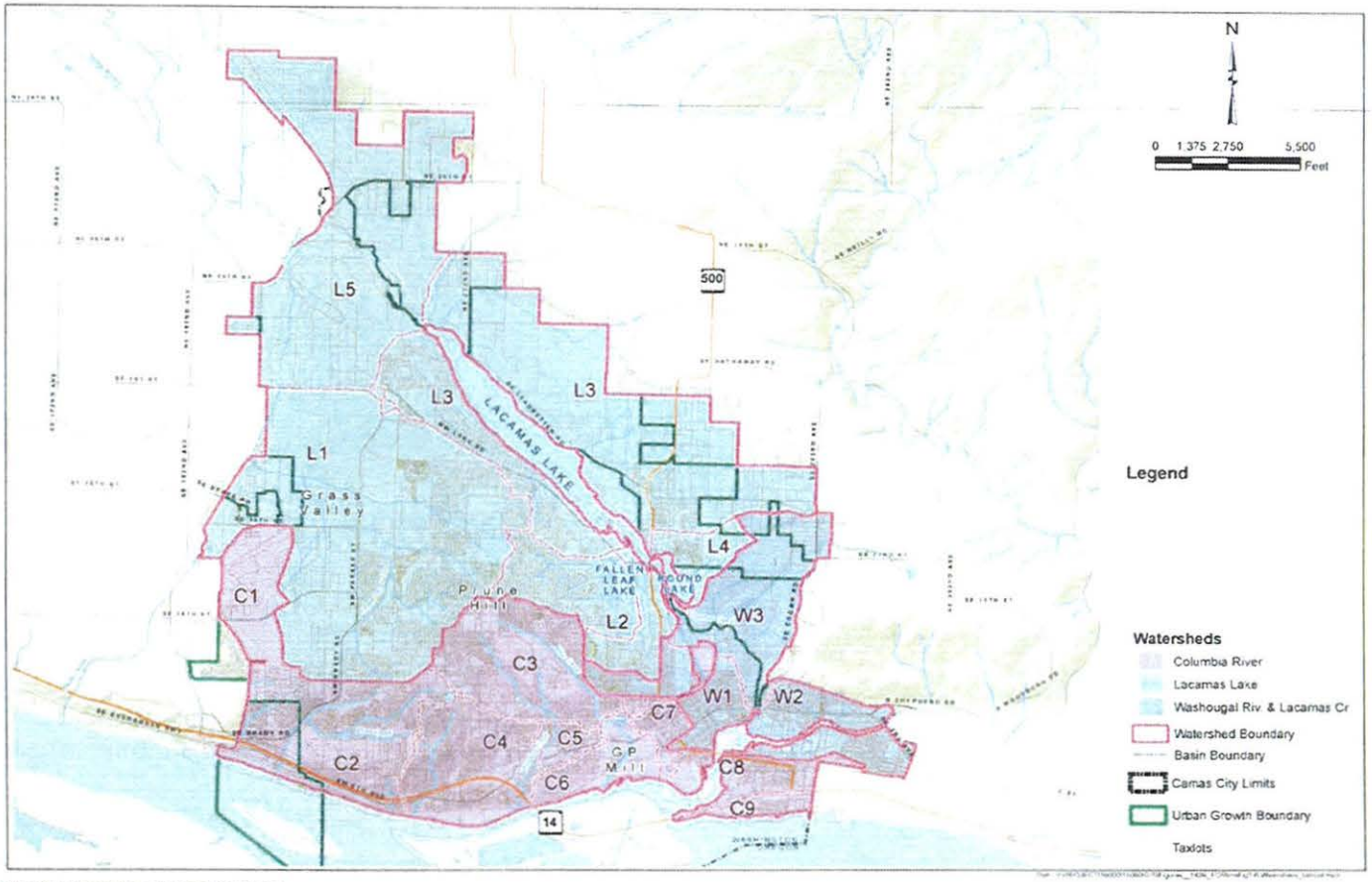


Figure 3-6: Watersheds and Basin Boundaries

Section 4—Study Area Watersheds

4.1 Introduction

The study area includes three major watersheds: Columbia River, the Washougal River, and Lacamas Lake. All surface water and piped stormwater conveyance systems drain to one of these water bodies through a network of interconnected drainage channels, creeks and storm pipes.

Previous studies have divided the City's watersheds into separate watersheds and basins. Table 4.1 lists the basins within each watershed and Figures 4-1 - 4-3 shows each watershed and basin.

Table 4.1: Camas Watersheds and Basins

Watershed	Basin	Area (AC)
Columbia	Fisher (C1)	340
	Brady Creek (C2)	687
	Blue Creek (C3)	593
	SW 6th (C4)	462
	Forest Home (C5)	76
	GP Mill (C6)	775
	Downtown (C7)	87
	Oak Park (C8)	137
	River Walk (C9)	66
Lacamas Lake	Dwyer Creek (L1)	2016
	Fallen Leaf (L2)	309
	Frontage (L3)	1822
	Round Lake (L4)	320
	Upper Lacamas (L5)	1463
Washougal	Downtown (W1)	151
	Frontage (W2)	360
	Lower Lacamas (W3)	522

Section 4—Study Area Watersheds

Continued

The characteristics of each watershed that influence stormwater management are presented in this section. This includes soil types, geological hazards, steep slopes, current land use and future development potential. This section discusses existing stormwater systems within each watershed, and it also lists the number of outfall pipes larger than 24-inches, as these outfalls are regulated under the City's NPDES Stormwater permit.

Ecology's Stormwater Management Manual for Western Washington (SMMWW) and Camas's Stormwater ordinance requires water quality treatment and control of flows over pre-European conditions to be provided for all development activities that generate 5,000 square feet or more of impervious surface. The SMMWW emphasizes infiltration and low impact over traditional flow detention facilities. The use of these measures is influenced by land use and soil characteristics, along with how steep the slopes are and whether there are geological hazards. This section discusses stormwater management options with these factors in mind.

Stormwater Management strategies are designed to meet the city's goals and objectives, as described in Section One. The key strategy relating to stormwater is to support economic development while protecting the environment.

4.2 Columbia River Watershed

Watershed Boundaries

The Columbia River marks the southern boundary of the City. Although all runoff in the City eventually makes it to the Columbia River, this watershed as defined within the study area just includes areas that either drains directly to the river through manmade conveyance pipes, or areas that drain through small streams to the river. The limits of the Columbia River watershed, along with individual basin boundaries within the watershed, are shown in Figure 4-1.

This watershed lies primarily between Prune Hill and the Columbia River, extending to the City's east and west boundaries. This watershed includes a portion of downtown Camas, the Georgia-Pacific paper mill, and the neighborhoods west and northwest of downtown, including the southern slopes of Prune Hill. One area, Basin C1 (See Figure 4-1), lies on the west edge of the City northwest of Prune Hill. This area drains to the Columbia River through the Fisher Swale.

Soil Characteristics

NRCS mapped soil types in this watershed consist mostly of Powell, Hesson, Olympic, and Cove soils, with some pockets of Vador and Sauvie soils (see Figure 3-4). All of these soils have moderate to slow infiltration rates, and as such infiltration of stormwater throughout this area is very limited.

Current Stormwater Systems

The portion of the watershed encompassing downtown Camas (Basin C7) is primarily drained

through manmade conveyance systems to the Columbia Runoff in these basins is discharged through small creeks and conveyance systems to the Columbia River. Since the development of these areas predates water quality regulations there are currently no water quality facilities.

Basin C6 encompasses the Georgia-Pacific paper mill. Blue Creek is piped under the mill site to the Columbia River, conveying stormwater from Basin C3. The mill has an industrial NPDES permit from Ecology that has its own requirements for discharges from the mill to the Columbia River.

Runoff from Basins C2-C5 is conveyed by small streams to the Columbia River.

Basin C1 drains west to the Fisher Swale. This swale runs south to the Columbia River (see Figure 4-1).

Current/Future Land Use Characteristics

Downtown is the traditional center of Camas and is the oldest and most developed part of town. It is a mix of commercial, light industrial, and some housing. As this area is densely developed, any future development activities would consist primarily of redeveloping existing properties or developing infill parcels.

The slopes of Prune Hill are zoned exclusively for single family residential development. Steep slopes and historically unstable areas may limit new development along the hill slopes.

The areas north and west of downtown, below Prune Hill (Basins C2, C3, C4, and C5), are more sparsely developed, and property improvements would consist mostly of infill and redevelopment. Drainage from these areas is conveyed to the Columbia River through Forest Home Creek and Blue Creek (which is piped through the George-Pacific paper mill site to the river).

Basin C1 (See Figure 4-1) is in this watershed, as it drains to the Fisher Swale, which drains to the Columbia River. This basin is primarily undeveloped, except for a recently constructed office complex and a small subdivision on the north side of NW Pacific Rim Boulevard at the City limits. This basin has large tracts with significant wetlands that have discouraged development to date. This basin has areas zoned for industrial, commercial, single-family and multifamily residential development (see Figure 3-2).

Stormwater Management

Stormwater management for development activities must meet the requirements in CMC 14.02 and follow the SMMWW. Options for meeting the most pertinent requirements, i.e. Minimum Requirements 5, 6 and 7 are described below and summarized in Table 4.2. The CIP projects that support these strategies are also listed in the table and complete descriptions are included in Section 5.

Continued

Table 4.2: Columbia River Watershed Stormwater Strategies	
On-site stormwater management	All projects must implement • BMP T5.13 (Post Construction Soil Quality and Depth); • BMPs T5.10A, B, or C (Downspout Full Infiltration, Downspout Dispersion Systems, Perorated Stub-out Connections); and • BMP T5.11 (Concentrated Flow Dispersion) or BMP T5.12 (Sheet Flow Dispersion) if feasible. Where required, bioretention facilities can be used with underdrains in areas where soil permeability is low. The use of permeable pavements in this area should review the requirements and exemptions in the 2012 SMMWW, and follow the guidelines in the "Low Impact Development Technical Guidance Manual for Puget Sound".
Runoff Treatment	Development activities should provide their own facilities designed per the SMMWW and the city code.
Flow Control	Convey flow directly to the Columbia River through man-made conveyance systems where possible. Where man-made conveyance systems aren't available, or where there are capacity constraints in existing systems, either upgrade the systems or provide on-site detention.
Related CIP Projects	SS02, Storm Sewer Conveyance Modeling SS05: Outfall Protection

On-site Stormwater Management

On-site stormwater management includes dispersion methods and Low Impact Development (LID) measures and are required to be used to the maximum extent feasible for all development activities that result in 2,000 square feet, or greater, of new, replaced, or new plus replaced hard surface area, or has land disturbing activities of 7,000 square feet or more.

All development will be required to amend their soils (BMP T5.13) and dispose of roof runoff in one of three methods (BMPs T5.10 A, B, or C). See the SMMWW for a complete description of these BMPs. All sites will also be required to implement concentrated or sheet flow dispersion BMPs where feasible.

Development activities required to meet flow control and runoff treatment must also meet an LID

performance standard described on page 2-29, Volume I of the SMMWW.

Soils in the Columbia River Watershed have moderate to low infiltration potential. As such, some sites may be able to use LID measures to treat and infiltrate some portion of the site stormwater. Where rates are low or questionable, under-drains can be placed above the bottom of the rock chamber within bioretention facilities to convey water after being treated through the soil media. Placing the under-drain above the facility bottom will allow for some infiltration. The SMMWW provides criteria for the use of these systems.

Development activities that are exempt from Minimum Requirement #7 (Flow Control) do not have to meet the SMMWW's LID Performance Standard, nor are they required to implement bioretention, rain gardens, permeable pavement, and full dispersion. For the Columbia River Watershed, this means that if the development can discharge directly to the Columbia River through a man-made conveyance facility with available capacity, these facilities are not needed unless used for runoff treatment.

Runoff Treatment

Runoff treatment is required for any new development or redevelopment meeting the size thresholds listed in the City's stormwater ordinance. Existing dense development in downtown limits the ability to place water quality facilities; streetscape LID facilities (i.e. stormwater planters, pervious pavement, green roofs) and mechanical treatment systems will likely be the most feasible options. Although soil conditions are not conducive for infiltration, bioretention facilities can still be used with under drains. They will provide robust stormwater treatment and some flow attenuation.

New residential areas on Prune Hill can likely accommodate larger water quality and flow control facilities in addition to LID and onsite stormwater management options. Particular attention should be paid to sediment transport and downstream impacts since the creeks draining the hill are very steep and have potential to carry high sediment loads (see CIP projects BC 01 and BC 02 in Section 5).

Flow Control

The Columbia River is listed in the 2012 SMMWW as a flow control exempt water body, which means stormwater discharges to the river are exempt from the city's flow control requirement, provided runoff is conveyed directly to the river in a man-made conveyance system sized to convey the flow. Development activities that discharge stormwater to conveyance systems without sufficient capacity, or to other water bodies or creeks, must meet the City's flow control requirements.

The City's downtown core currently contains a storm sewer system that conveys runoff directly to the Columbia River. The system has been in place for many years, and the maintenance staff have

not identified any areas of flooding or other signs of capacity issues. The capacity of the system will be quantified with *Capital Project SS02, Storm Sewer Modeling* (See Section 5). If capacity constraints are identified, the model can be used to determine pipe size upgrades.

Basins C1-C5 discharge to small streams that convey stormwater to the Columbia River. Development or redevelopment in these basins would need to provide detention. Basin C6 is the mill site, which is completely developed. Runoff from Basins C8 and C9 could discharge directly to the Columbia River if the conveyance system has capacity or if the system size was increased.

4.3 Lacamas Lake Watershed

Watershed Boundaries

This watershed encompasses the northern, mostly undeveloped, areas of the City as well as the north side of Prune Hill and lakeshore areas. Lacamas Lake is fed by Lacamas Creek, which in turn is fed by five different creeks, many conveying water from outside the City limits. Dwyer Creek, which conveys runoff from a large portion of northwest Camas, discharges to Lacamas Creek.

Note that all discharges to Lacamas Lake, either directly or indirectly, are required to treat for phosphorus.

The limits of the Lacamas Lake watershed, along with basin boundaries within the watershed, are shown in Figure 4-2.

Current/Future Land Use Characteristics

Large portions of Grass Valley and the north shore of Lacamas Lake are currently undeveloped. Grass Valley is zoned primarily for industrial and commercial development, and the Northern Urban Growth Area (NUGA) is zoned for multi-family and single family developments, along with some commercial and light industrial. The northern and eastern slopes of Prune Hill are zoned primarily for single-family residential development but there are some mixed-use areas with multifamily residential, commercial, and open space tracts. The south lakeshore areas are zoned primarily for single-family residential development with some industrial and park open spaces on the east end of the lake. Currently, the south side of the lake is developed as single-family residential properties but the north side remains mostly undeveloped. Please see Figure 3-2 for zoning.

The residential areas on Prune Hill and the south shore of Lacamas Lake are unlikely to see new development except infill or redevelopment. The industrially zoned areas in Grass Valley and northern parts of the City have many wetlands which limit the developable area. The land north of the lake is zoned for light-industrial, single family, and multifamily development.

Soil Characteristics

NRCS mapped soil types in this watershed consist mostly of Hesson, Powell, Olympic, and Vader

soils with some areas of Odne, Dollar, Cove, Lauren, Puyallup, Hockinson, McBee, Semaihmoo and Tisch soils (see Figure 3-4). Most of these soils are moderately to poorly drained and limit the infiltration of stormwater, except for Lauren soils, which are present in the NUGA area. This soil is generally moderate to rapidly draining and may support infiltration of stormwater. Lenses of moderately-draining Puyallup, Olympic, and Hesson soils are present near Round Lake and Fallen Leaf Lake, and infiltration facilities have been installed in these areas (see Figure 4-2).

Current Drainage System

Grass Valley and the northwest slopes of Prune Hill drain to Dwyer Creek. Most of the residential areas on Prune Hill were developed in the 1990s and include privately-owned stormwater treatment and flow control facilities. Information on the stormwater infrastructure in the industrial and commercial areas is incomplete but some private water quality facilities exist. There are two NPDES regulated outfalls to Dwyer Creek (see Figure 4-2). Developments along the south side of Lacamas Lake do not include flow control facilities, as direct discharges to the lake are exempt.

There is one mapped NPDES regulated outfall on the west side of Lacamas Lake (see Figure 4-2).

Most of the area on the west side of Round Lake lack runoff treatment and flow control facilities. A small area in the far western corner of the basin as well as the eastern side of the basin was developed during a time when treatment and flow control facilities were required (see Figure 4-2).

Stormwater Management

Stormwater management for development activities must meet the requirements in CMC 14.02 and follow the SMMWW. Options for meeting the most pertinent requirements, i.e. Minimum Requirements 5, 6 and 7 are described below and summarized in Table 4.3. The CIP projects that support these strategies are also listed in the table and complete descriptions are included in Section 5.

Table 4.3: Lacamas Lake Watershed Stormwater Strategies

On-site stormwater management	All projects must implement • BMP T5.13 (Post Construction Soil Quality and Depth); • BMPs T5.10A, B, or C (Downspout Full Infiltration, Downspout Dispersion Systems, Perorated Stub-out Connections); and • BMP T5.11 (Concentrated Flow Dispersion) or BMP T5.12 (Sheet Flow Dispersion) if feasible. Where required, bioretention facilities can be used with underdrains in areas where soil permeability is low. The use of permeable pavements in this area should review the

Table 4.3: Lacamas Lake Watershed Stormwater Strategies	
	requirements and exemptions in the 2012 SMMWW, and follow the guidelines in the "Low Impact Development Technical Guidance Manual for Puget Sound".
Runoff Treatment	Development activities should provide their own facilities designed per the SMMWW and the city code.
Flow Control	Convey flow directly to Lacamas Lake through man-made conveyance systems where possible. Where man-made conveyance systems aren't available, or where there are capacity constraints in existing systems, either upgrade the systems or provide on-site flow control. This may be met through detention or through infiltration, depending upon the results of on-site infiltration testing.
Related CIP Projects	ULB 01: Leadbetter Road Culvert Capacity Review ULB 02: North Urban Growth Area Stormwater Plan

On-site Stormwater Management

On-site stormwater management includes dispersion methods and Low Impact Development (LID) measures and are required to the maximum extent feasible for all development activities that result in 2,000 square feet, or greater, of new, replaced, or new plus replaced hard surface area, or have land disturbing activities of 7,000 square feet or more.

All development will be required to amend their soils (BMP T5.13) and dispose of roof runoff in one of three methods (BMPs T5.10 A, B, or C). All sites will also be required to implement concentrated or sheet flow dispersion BMPs where feasible.

Development activities required to meet flow control and runoff treatment must also meet an LID performance standard described on page 2-29, Volume I of the SMMWW.

Soils in the Lacamas Lake Watershed have moderate to low infiltration potential, except in the NUGA area where the potential for infiltration may be higher. As such, some sites may be able to use LID measures to treat and infiltrate some portion of the site stormwater. Where rates are low or questionable, under-drains can be placed above the bottom of the rock chamber within bioretention facilities to convey water after being treated through the soil media. Placing the under-drain above the facility bottom will allow for some infiltration. The SMMWW provides criteria for the use of these systems.

Development activities that are exempt from Minimum Requirement #7 (Flow Control) do not

have to meet the SMMWW's LID Performance Standard, nor are they required to implement bioretention, rain gardens, permeable pavement, and full dispersion. For the Lacamas Lake Watershed, this means that if the development can discharge directly to Lacamas Lake through a man-made conveyance facility with available capacity, these facilities are not needed unless used for runoff treatment.

A capital project has been are defined and is included in Section 5 to determine what is needed for the NUGA area to meet the flow control exemption. This project (ULB 01) has two components:

- One is to prepare a stormwater basin plan
- The second is to assess the capacity of the culverts under Leadbetter Road, as these could be used to convey water from the NUGA to Lacamas Lake to meet the flow control exemption. If the culverts are found to be too small to convey the developed site runoff, appropriate pipe sizes can be determined.

Runoff Treatment

Runoff treatment is required for any new development or redevelopment meeting the size thresholds listed in the City's stormwater ordinance. LID measures or more traditional treatment measures as described in the SMMWW can be used. Note that discharges above the dam at Round Lake are required to treat for phosphorus.

Flow Control

Lacamas Lake is listed in the 2012 SMMWW as a flow control exempt water body, which means stormwater discharges to the lake are exempt from the city's flow control regulation provided runoff is conveyed directly to the lake in a man-made conveyance system sized to convey the flow. Development activities that discharge stormwater to conveyance systems without sufficient capacity, or to other water bodies or creeks, must meet the City's flow control requirements.

The north side of Prune Hill and Grass Valley will need to meet the flow control standard. Regionally based facilities may be a feasible option for Grass Valley if private partners are willing to pool efforts.

The NUGA may have soils suited for infiltration. As such, flow control requirements may be met through installation of UICs or shallow LID facilities. If UICs are used, these should be registered with Ecology and rule-authorized before acceptance by the city. This report includes a capital project to generate a stormwater basin plan for the NUGA area.

Section 4—Study Area Watersheds

Continued

4.4 Washougal River & Lower Lacamas Creek Watershed

Watershed Boundaries

The Washougal River watershed drains the southwestern portion of the City (see Figure 4-3). Within the City limits this watershed encompasses both sides of the Washougal River, portions of downtown Camas, and tributaries to Lower Lacamas Creek. The watershed boundaries are approximately SR-14 on the south, 3rd Avenue and Garfield Street to the west in downtown Camas, and approximately SE Nourse Road to the north (the watershed extends east beyond the City limits).

Current/Future Land Use Characteristics

The downtown area in Basin W1 is zoned primarily for single-family residential development with some commercial and multifamily residential areas. The downtown was mostly developed between the 1920s and 1950s. Some infill and redevelopment may occur, but the existing development is fairly dense. The riverfront areas along the Washougal River in Basin W2 are zoned for industrial, commercial, and multi-family and single-family residential. Development in this basin is from the 1940s to 1970s with some infill in the last 15 years. Additional infill is likely, especially in the areas zoned for multifamily residential properties. Most of the large tracts that border the Washougal River will not be developed because they belong to Camas (Parks) or are encumbered by other facilities.

The Lower Lacamas Creek Basin W3 is located within the urban growth area and is zoned for single-family residential development and park open space. This area is currently undeveloped and will likely see new development. See Figure 3-2 for zoning. Much of this is park property owned by Camas & Clark County. It won't be developed.

Soil Characteristics

NRCS mapped soil types in this watershed consist of Olympic and Vader soils with large areas of fill near downtown Camas and pockets of Hesson, Powell, Rockland, Hillsboro, Washougal and Sauvie soils throughout the watershed (see Figure 3-4). The soils are rated as moderate to poorly draining and will not likely support the infiltration of stormwater.

Current Drainage System

Stormwater from the downtown area (Basin W1) is piped without treatment or flow control to discharge to the Washougal River on the south side of the basin through an NPDES regulated outfall (see Figure 4-3).

Stormwater from some of the newer residential developments in Basin W2 is routed though runoff treatment and flow control facilities prior to discharging to Lower Lacamas Creek just upstream of its confluence with the Washougal River. This basin includes one NPDES regulated outfall, as shown in Figure 4-3.

Stormwater Management

Stormwater management for development activities must meet the requirements in CMC 14.02 and follow the SMMWW. Options for meeting the most pertinent requirements, i.e. Minimum Requirements 5, 6 and 7 are described below and summarized in Table 4.4. There are no CIP projects identified in Section 5 that support stormwater strategies in this watershed.

Table 4.4: Washougal River/Lower Lacamas Creek Watershed Stormwater Strategies

On-site stormwater management	All projects must implement • BMP T5.13 (Post Construction Soil Quality and Depth); • BMPs T5.10A, B, or C (Downspout Full Infiltration, Downspout Dispersion Systems, Perorated Stub-out Connections); and • BMP T5.11 (Concentrated Flow Dispersion) or BMP T5.12 (Sheet Flow Dispersion) if feasible. Where required, bioretention facilities can be used with underdrains in areas where soil permeability is low. The use of permeable pavements in this area should review the requirements and exemptions in the 2012 SMMWW, and follow the guidelines in the "Low Impact Development Technical Guidance Manual for Puget Sound".
Runoff Treatment	Development activities should provide their own facilities designed per the SMMWW and the city code.
Flow Control	Flow Control per CMC 14.02 and the SMMWW will be required. This may be met through detention or through infiltration, depending upon the results of on-site infiltration testing.
Related CIP Projects	None identified

On-site Stormwater Management

On-site stormwater management includes dispersion methods and Low Impact Development (LID) measures and are required to the maximum extent feasible for all development activities that result in 2,000 square feet, or greater, of new, replaced, or new plus replaced hard surface area, or have land disturbing activities of 7,000 square feet or more.

All development will be required to amend their soils (BMP T5.13) and dispose of roof runoff in one of three methods (BMPs T5.10 A, B, or C). All sites will also be required to implement

concentrated or sheet flow dispersion BMPs where feasible.

Development activities required to meet flow control and runoff treatment must also meet an LID performance standard described on page 2-29, Volume 1 of the SMMWW.

Soils in this watershed are moderate to poorly draining. As such, some sites may be able to use LID measures to treat and infiltrate some portion of the site stormwater. Where rates are low or questionable, under-drains can be placed above the bottom of the rock chamber within bioretention facilities to convey water after being treated through the soil media. Placing the under-drain above the facility bottom will allow for some infiltration. The SMMWW provides criteria for the use of these systems.

Runoff Treatment

Similar to the downtown area in the Columbia River watershed, existing dense development limits the water quality treatment options in Basin W1 to LID facilities and mechanical systems. Residential infill in Basin W2 can likely accommodate larger water quality and flow control facilities in addition to LID techniques.

Water quality treatment must meet the TMDL standards since Lacamas Creek is a 303(d) listed water body; please see the discussion in Section 2.2.2 for more information.

Runoff treatment is required for any new development or redevelopment meeting the size thresholds listed in the City's stormwater ordinance. LID measures or more traditional treatment measures as described in the SMMWW can be used.

Flow Control

Discharges to the Washougal River and to Lower Lacamas Creek and its tributaries must meet the City's flow control requirements, as these water bodies are not included on the flow control exemption list in the 2012 SMMWW. Runoff treatment is required for any new development or redevelopment meeting the size thresholds listed in the City's stormwater ordinance.

The banks of Lower Lacamas Creek and its tributaries are steep with active and potentially unstable slopes. Meeting the flow control requirements for new development in Basin W3 will be essential to prevent further degradation.

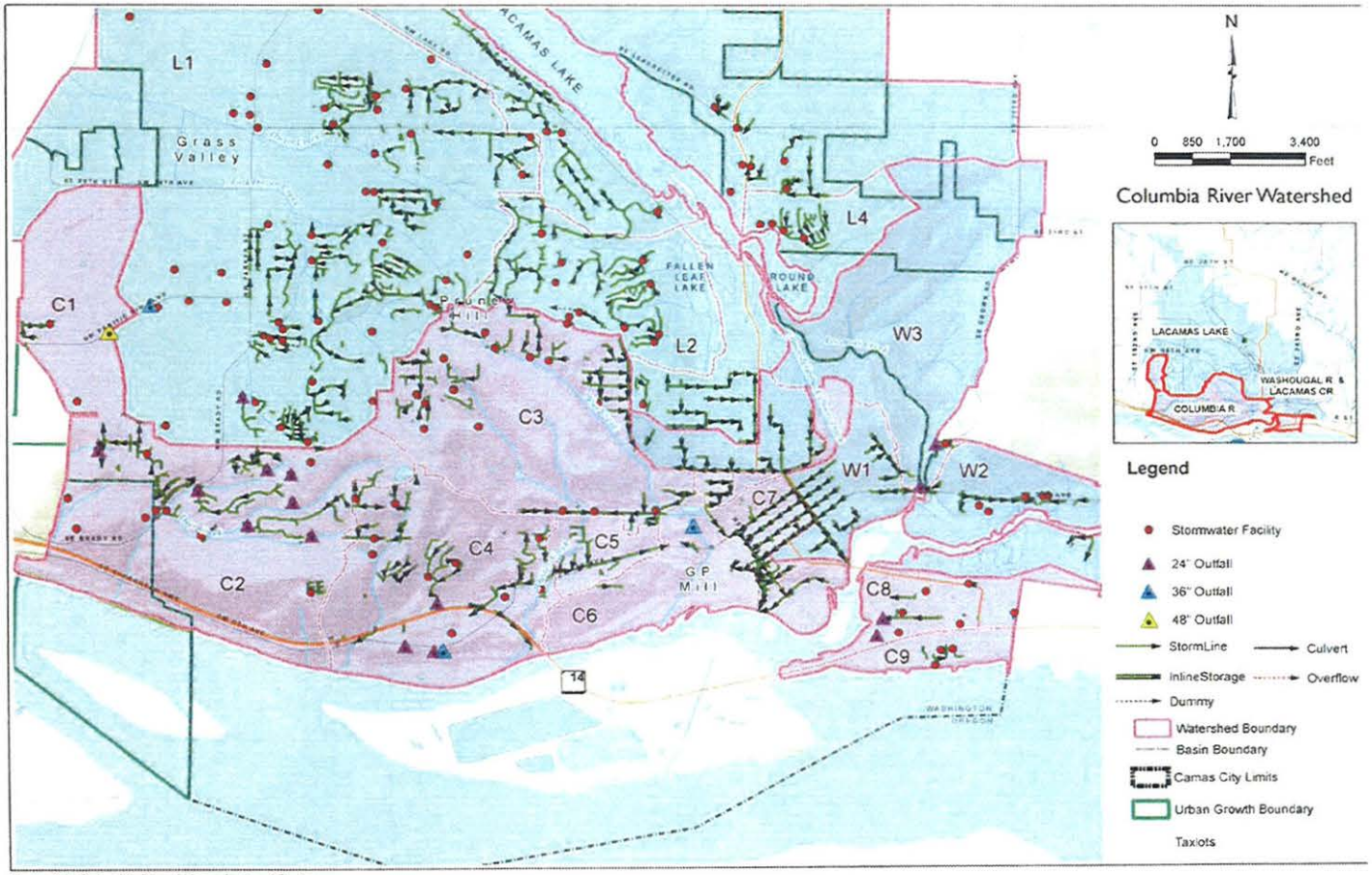


Figure 4-1: Columbia River Watershed and Basins

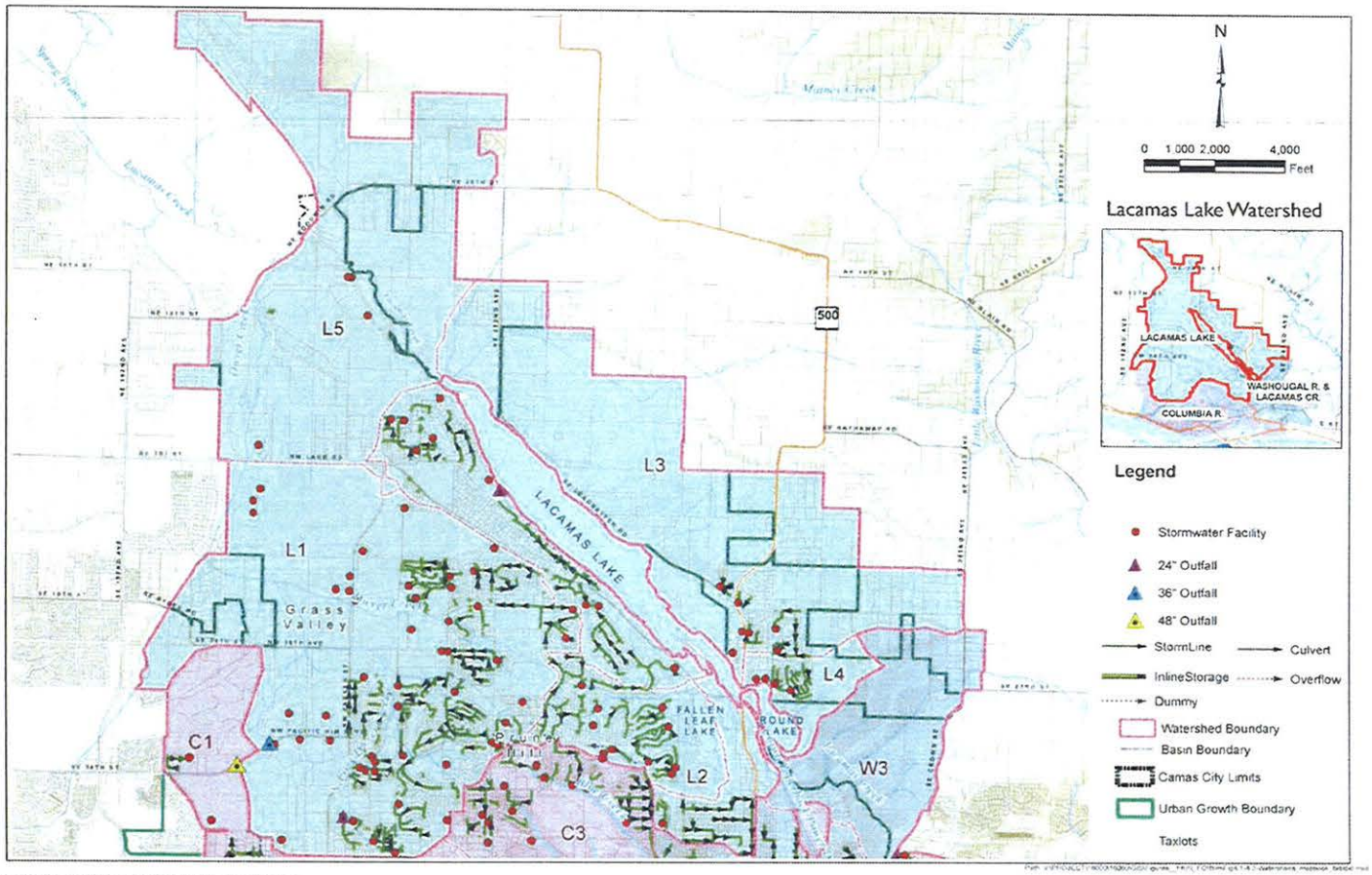


Figure 4-2: Lacamas Lake Watershed and Basins

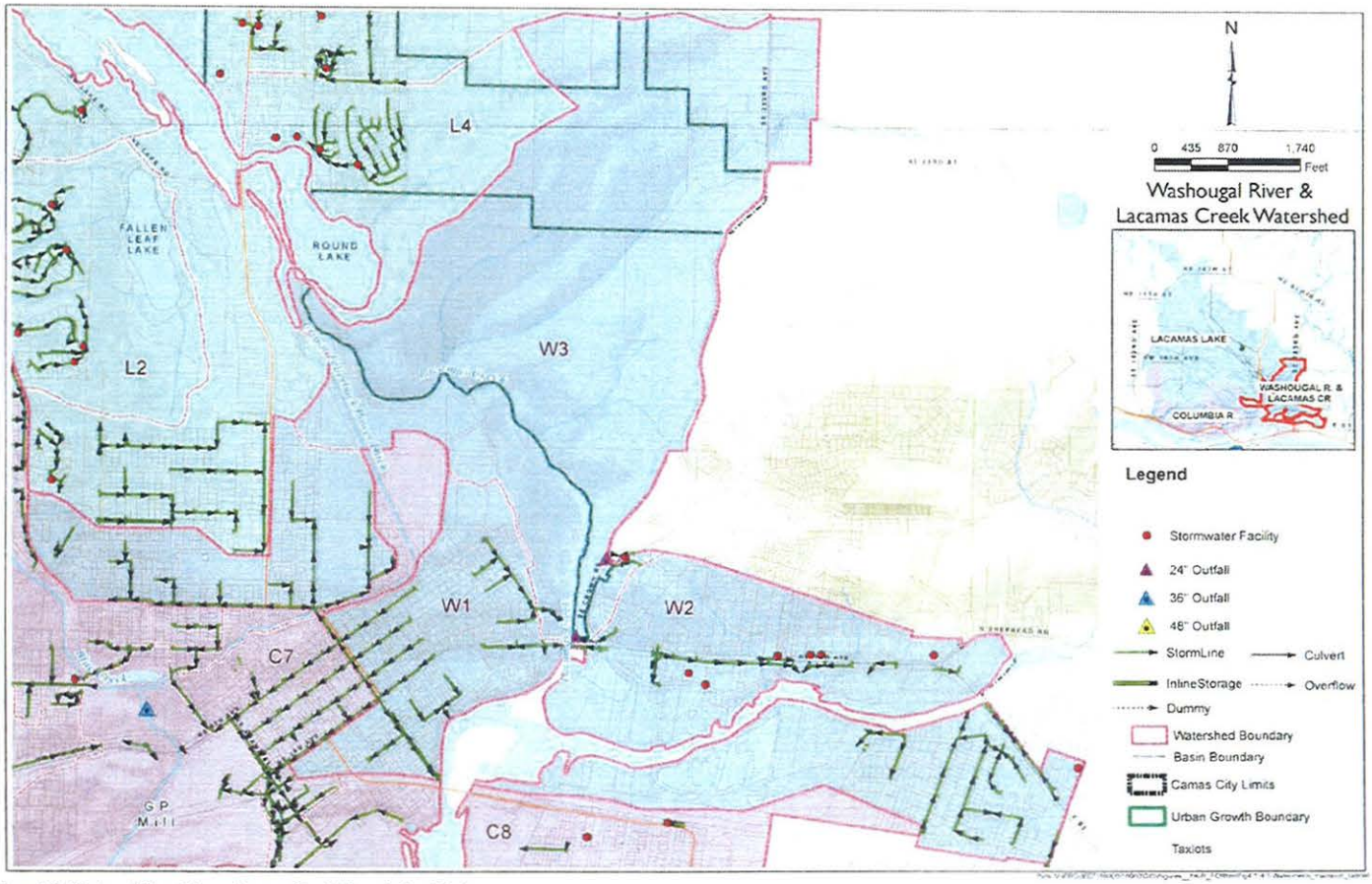


Figure 4-3: Washougal River & Lower Lacamas Creek Watershed and Basins

Section 5—Capital Improvements

5.1 Introduction

This section describes the capital improvement projects for this first version of the City's Stormwater Capital Improvement Plan. The projects described in this section were selected by City staff and are based on:

- Addressing existing facilities in need of repairs
- Addressing identified flooding concerns
- Coordinating stormwater facility design and construction with transportation project needs
- Reducing reoccurring maintenance activities
- Planning for future development and capacity needs

Table 5.1 lists the recommended CIP's, a priority assignment (low, medium, or high), and an estimated implementation cost. A City map with CIP locations is shown in Figure 5-1.

There are two basic categories of capital improvement projects; those that deal with the planning aspects of stormwater management, and those that involve the improvements of structures and facilities in the City's stormwater drainage system. The projects are broken out by watershed, and the project descriptions include the basin name and the location, where applicable.

The project numbering is based upon the basin the project is located in, except for projects that are City-wide. Referring to Table 5.1, "SS" stands for Storm Sewer and is used for City-wide projects. "DC" stands for Dwyer Creek and is used for projects in the Dwyer Creek basin. "ULB" stands for Upper Lacamas Basin, and "CR" is for Columbia River.

Table 5.1: CIP Summary

	Project Name
SS 01	Transportation Related Stormwater Facilities
SS 02	Storm Sewer Conveyance Modeling
DC 01	North Dwyer Creek Stormwater Basin Plan
DC 02	Grass Valley Stormwater Basin Plan

Section 5—Capital Improvements

Continued

Table 5.1: CIP Summary	
	Project Name
DC 03	Pacific Rim Boulevard Crossing
DC 04	Julia Street Stormwater Pond Retrofit
DC 05	Thomas/Carson Estates Runoff Control
ULB 02	North Urban Growth Area (NUGA) Stormwater Basin Plan
CR 01	Forest Home Road Sediment Basin
CR 02	Blue Creek Sediment Basin

Separate project sheets have been prepared for each project listed in Table 5.1. These sheets are included on the following pages and include a description of the problem to be addressed and a description of the proposed solution. The sheets also include a cost estimate and possible funding sources.

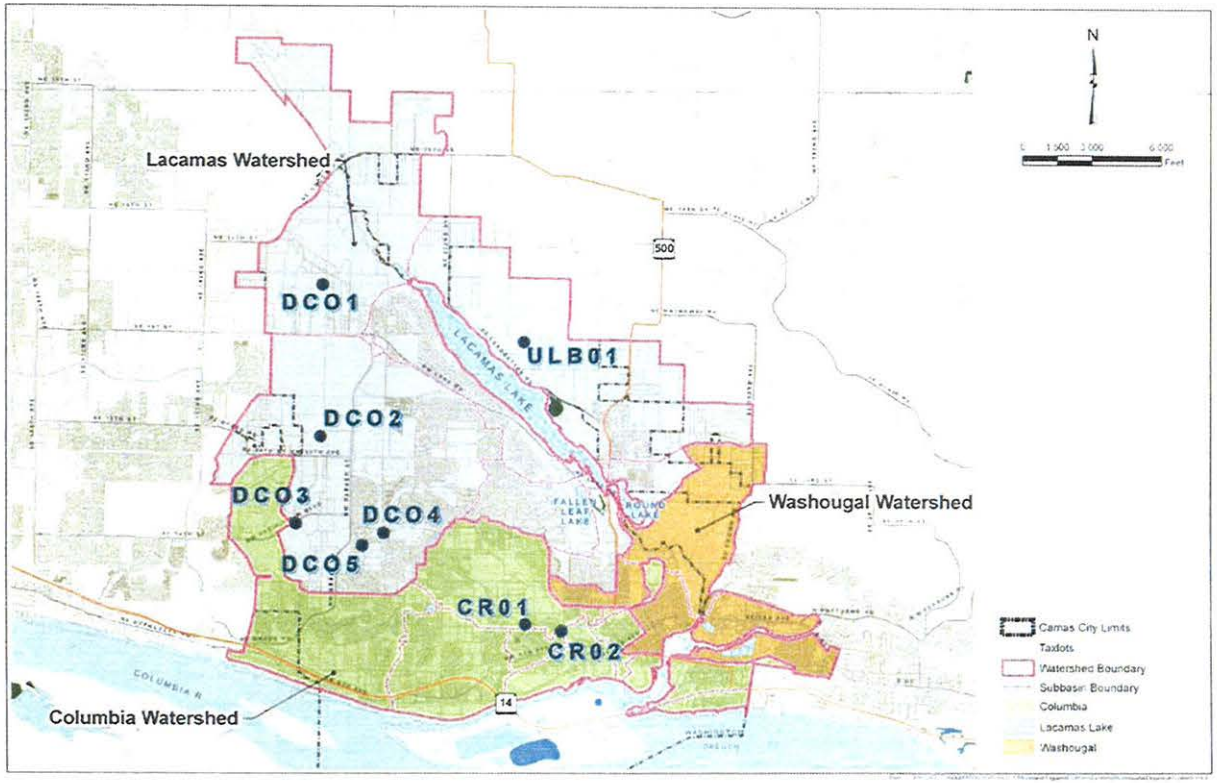


Figure 5-1: CIP Project Locations

Section 5—Capital Improvements

Continued

Project Name: Transportation Related Stormwater Facilities

Project ID: SS 01

Watershed: City-Wide

Location: City-Wide

Description

As the City develops or improves their roadway network, they are finding that the construction of stormwater facilities to meet their NPDES Phase II permit adds significantly to the roadway costs. Stormwater treatment, conveyance and runoff control facilities, along with property acquisition, and design account for 20 to 30 percent of a new roadway. As such, these costs influence the City's road construction fund. The City is exploring options to establish a dedicated funding source for City stormwater construction costs.

The current storm utility is not designed for major capital improvements and has not been able to support the stormwater portion of new roadway construction. To adequately fund these capital improvements a System Development Charge (SDC) could be implemented. The SDC could be allocated at a rate of 67% Developer funded and 33% City to be consistent with the water and sewer SDC. This breakdown accounts for the developer responsibility per code to install the minimum requirements for their development and allowing a credit or providing funding for the regional component.

Proposed Project

This is for the creation of a funding source for the design, acquisition, and construction of facilities to convey, treat, and control the volume of runoff from public road projects as required in the City's stormwater ordinance. This fund will be used to support the regional component of the roadway improvements included in the City's Six Year Transportation Plan in conjunction with other funding sources such as Transportation Impact Fee (TIF).

Cost Estimate/Funding Sources

The City's transportation plan is embodied in two documents: the Six Year Transportation Plan and the TIF study. The adopted Transportation Impact Fee includes collection and conveyance storm water costs but not land acquisition or treatment/detention, which is estimated to be 11 percent of the total roadway cost.

Funding for stormwater facilities tied to transportation projects generally consists of developer contributions, loan, grants and city funding sources (REET and General Fund).

Section 5—Capital Improvements

Continued

The dollar amount shown in the table below represents the unfunded stormwater portion of the city's proposed transportation projects. They consist of the storm components from the TIF study (which include the land costs, and treatment/detention requirements) and any additional projects listed on the Six Year Street Plan (costs include design, collection, land, treatment and detention based on a 30 percent cost of construction).

Table 5.2: Transportation Related Stormwater Facilities Estimate and Funding Plan

Cost Estimates

TIF Eligible Routes

Item	Cost	Developer Share	Regional cost and SDC credit eligible if enacted
Land	$4,000,000	$2,680,000	$1,320,000
Treatment/Detention	$4,000,000	$2,680,000	$1,320,000
Total	**$8,000,000**	**$5,360,000**	**$2,640,000**

Six Year Eligible Routes

Item	Cost total 30% of overall six year cost	Developer Share	Regional cost and SDC credit eligible if enacted
Design			
Conveyance system			
Land			
Treatment/Detention			
Total	**$4,500,000**	**$3,015,000**	**$1,485,000**

Funding Source

City	Grant	Developer	SDC
X	X	X	X

Project Name: Storm Sewer Conveyance Modeling

Project ID: SS 02

Watershed: City-Wide

Location: City-Wide

Description

The City's conveyance system is over 70 years old in some locations in the downtown core and the City anticipates the need to repair or replace some of these pipes. In addition, the carrying capacity of some of the City's stormwater pipelines has been reached or exceeded.

As systems age and replacement or upgrades are considered, it is important that new systems are sized properly to convey existing flows and to carry future flows that may result from new development or redevelopment. The City does not currently have a model for helping them decide how to size a replacement system.

New pipes can be sized fairly easily using simple models (i.e. Manning's Equation). These models can quickly determine the pipe size needed to convey flows assuming open channel flow. However, they can underestimate the capacity of existing systems, as they do not account for system surcharging. In addition, the hydraulics of existing pipe systems can be very complex. This is because flow enters the system from many different locations, and the interaction between these flows combined with the characteristics of the pipe system itself causes the water to do unpredictable things, even moving upstream. The equations and methods to model these systems are complex but are now routinely performed with computer models.

A hydrologic and hydraulic model of the city's conveyance system would provide them with a tool for planning and building necessary improvements. This can be used for existing systems to size upgrades, and for sizing new systems where planned by the city.

Proposed Project

Develop a hydraulic computer model of the City's storm sewer pipe system. This model can be built in phases and would only need to include the larger pipes which serve as system trunk sewers or backbones. Important systems to model include:

- Systems where excessive surcharging (water coming out of manholes or catch basins) occurs

- Older systems where replacements are planned or likely
- Systems where proposed development will contribute runoff to existing conveyance pipes and may exceed the system capacity

Cost Estimate/Funding Sources

A cost estimate has been prepared assuming most of the storm system in the downtown core is modeled, along with limited areas outside the downtown core. The work includes sub-basin hydrologic modeling and hydraulic modeling of pipes 12-inches and larger.

Table 5.3: Storm Sewer Conveyance Modeling Estimate and Funding Plan

Cost Estimate	
Item	Cost
Hydrologic and hydraulic modeling	$50,000

Funding Source			
City	Grant	Developer	SDC
X	X	X	X

Project Name: North Dwyer Creek Stormwater Basin Plan

Project ID: DC 01

Watershed: Lacamas Lake

Basin: Dwyer Creek

Location: North Dwyer Creek Basin

Description

The North Dwyer Creek study area is bounded by NW Lake Road on the south, Friberg Road on the west, NW Payne Road on the east, and the Camas Meadows development on the north (see Figure 5-1). The City developed a comprehensive land-use master plan for this area in 2001 and will be updating this plan in 2012.

The updated basin plan will include a stormwater management strategy that addresses flow control, water quality, and conveyance. This plan will be designed to meet the City's recently adopted stormwater ordinance and the Stormwater Management Manual for Western Washington (SMMWW).

Stormwater from this area is tributary to North Dwyer Creek, which runs north along the west edge of the study area, then east to Lacamas Creek, which flows to Lacamas Lake. Lacamas Lake eventually discharges to the Washougal River approximately one-half mile from its confluence with the Columbia River.

Lacamas Creek and five of its tributaries (Dwyer Creek, Fifth Plain Creek, Shanghai Creek, Matney Creek, and China Ditch) are listed on Washington State's 303(d) list of impaired water bodies for fecal coliform bacteria, temperature, dissolved oxygen, and pH. A Total Maximum Daily Load (TMDL) plan is currently being prepared by the Washington State Department of Ecology for Lacamas Creek and four of the five tributaries.

The City requires phosphorus treatment in the Lacamas watershed above the dam at the south end of Round Lake for all development sites exceeding one acre in size.

Proposed Project

This CIP is to provide funding for development of a stormwater basin plan in conjunction with the updated land-use master plan. This plan should include the following:

- An evaluation to determine the feasibility of using Low Impact Development BMPs in the study area. This determination should be made in conjunction with the development of road sections to determine if measures such as bioretention planters can be placed within the right-of-way for treating roadway stormwater.
- An evaluation of the feasibility of providing regional detention for meeting flow control and/or runoff treatment requirements.
- A list of runoff treatment BMPs to be used in the study area that meets SMMWW requirements, TMDL requirements, and the City's phosphorus requirement to be used with private developments.
- Sizing of major stormwater conveyance pipes that serve multiple properties.
- Documentation of the stormwater portion of a larger master plan document.
- An evaluation of the ability to discharge to Lacamas Lake to access the flow control exemption.

Cost Estimate/Funding Sources

Table 5.4: North Dwyer Creek Estimate and Funding Plan

Cost Estimate	
Item	Cost
Stormwater Component of Master Plan	$30,000

Funding Source			
City	Grant	Developer	SDC
X	X	X	X

Project Name: Grass Valley Stormwater Basin Plan

Project ID: DC 02

Watershed: Lacamas Lake

Basin: Dwyer Creek

Location: Grass Valley (vicinity of NW 38th Street and Parker Road)

Description

The Grass Valley Area of Camas is bordered by Pacific Rim Boulevard on the south, NW Dahlia Road on the east, Lake Road on the north, and the City limits on the west. The center of Grass Valley is roughly at the intersection of Parker Road and 38th Avenue. The area contains both homes and many light industrial and technology businesses.

The Grass Valley area contains many acres of low-quality wetlands. Because of this wetland designation, these properties have remained undeveloped and are used for grassland farming.

The headwaters of Dwyer Creek are on the northwest slopes of Prune Hill. The creek runs north to NW 38th Avenue, then west along the south side of the road until it reaches Parker Road. From there it crosses the road diagonally from the southeast to northwest where it then travels along the north side of NW 38th Avenue for approximately 1,200 feet. At that point it turns north through private properties.

Where Dwyer Creek turns north an intermittent stream carries runoff from south to north under NW 38th Avenue and joins with Dwyer Creek. At this location along NW 38th Avenue, nuisance flooding that impacts NW 38th Avenue occurs on a frequent basis.

Proposed Project

This project is to develop a plan that will:

- Develop a plan for the property owners' that consolidates and enhances the portions of the delineated wetlands on these properties, allowing other portions of the properties to be developed.
- Develop a concept for a regional stormwater facility to meet the city's flow control requirement. This facility could be integrated with the wetland enhancement area and could provide flow control for the private parcel's and for the city's planned improvements to NW 38th Avenue.

Section 5—Capital Improvements

Continued

Cost Estimate/Funding Sources

Table 5.5: Grass Valley Estimate and Funding Plan			
Cost Estimate			
Item		Cost	
Conceptual Designs		$75,000	
Funding Source			
City	Grant	Developer	SDC
X	X	X	X

Project Name: Pacific Rim Boulevard Crossing

Project ID: DC 03

Watershed: Lacamas Lake

Basin: Dwyer Creek

Location: Pacific Rim Boulevard west of NW Fisher Creek Drive

Description

Pacific Rim Boulevard experiences routine flooding in a low spot west of NW Fisher Creek Drive and the entrance to Sharp Electronics (See Figure 5-1). The stormwater conveyance system that collects stormwater in Pacific Rim Boulevard comes from both directions to this low point and discharges north to a tributary of Dwyer Creek. In addition, there are two culverts under the road that carry stormwater from properties south of the street to the north side.

The land adjacent to Pacific Rim Boulevard rises steeply to the south. The area contains shallow groundwater and surface water that runs towards Pacific Rim Boulevard. The property owner has attempted to collect this water with French drains and surface trenches. This water is directed to culverts that carry it under NW Pacific Rim Boulevard.

Proposed Project

Determine the cause of the flooding at this low spot and develop a plan for alleviating this problem. This should include:

- A hydrologic study that includes the private parcel south of Pacific Rim Boulevard
- The development of a model of the system to determine capacity
- Development of a conceptual design and construction cost estimate

Section 5—Capital Improvements

Continued

Cost Estimate/Funding Sources

Table 5.6: Pacific Rim Boulevard Estimate and Funding Plan			
Cost Estimate			
Item	Cost		
Hydrologic and hydraulic model	$5,000		
Conceptual Designs and Cost Estimate	$15,000		
Total	$20,000		
Funding Source			
City	Grant	Developer	SDC
X	X	X	X

Project Name: Julia Street Stormwater Pond Retrofit

Project ID: DC 04

Watershed: Lacamas Lake

Basin: Dwyer Creek

Location: East of cul-de-sac at intersection of NW Julia Street and NW 26th Avenue

Description

The Julia Street Stormwater Facility lies at the bottom of a steep canyon at the end of a cul-de-sac east of the NW Julia Street and NW 26th Avenue intersection. A small intermittent stream in the bottom of the canyon runs in a 36-inch diameter pipe around this pond. The pond was constructed in the late 1990's as a detention facility, and it detains flow from two subdivisions that sit on top of each side of the canyon - Columbia Ridge on the south side and Oak Ridge Estates on the north side.

Stormwater is discharged from several subdivisions into the intermittent stream upstream of the detention facility. Sediment from upstream development and landslides in the steep canyon walls is carried in this intermittent stream and deposited at the entrance to the pipe. The pipe routinely gets filled in from this sediment, causing the stream to overflow into the detention pond.

Figure 5-3: Julia Street Pond in a spring 2012 flood event

Although the facility is privately-owned and maintained, it sits on City-owned property. Occasionally the City has removed sediment from the pipe and from the bottom of the pond. Although there is an access road leading to the pond, access to the storm pipe and pond bottom is challenging.

Proposed Project

An evaluation should be performed to determine if this pond can be reconstructed and retrofitted to eliminate these issues. Consideration should be given to the following:

- Installation of a debris collection structure where the stream enters the pipe to prevent the pipe from clogging
- Remove the bypass pipe and allow the stream to flow through the pond
- Enlarge the pond to the northwest to allow more flood storage
- Construct a forebay for trapping sediment
- Construct a maintenance road for access to the forebay and all parts of the facility

Cost Estimate/Funding Sources

Table 5.7: Julia Street Stormwater Retrofit Estimate and Funding Plan

Cost Estimate

Item	Cost
Alternatives Analysis	$5,000
Conceptual Designs and Construction Cost Estimate	$20,000
Construction	$210,000
Construction Management	$20,000
Total	**$255,000**

Funding Source

City	Grant	Developer	SDC
X	X		

Project Name: Thomas/Carson Estates Flooding

Project ID: DC 05

Watershed: Lacamas Lake

Basin: Dwyer Creek

Location: Thomas and Carson Estates, along NW Maryland Street

Description

These two subdivisions sit near the bottom of the northwest slope of Prune Hill. Runoff from the hillside above these subdivisions streams down the hillslope and floods nearby roads and lawns. Various ditches and swales provide some collection and routing of stormwater to stormwater facilities located in these subdivisions; however, these conveyance facilities are overtopped in large storm events.

Proposed Project

Design and construct a conveyance system capable of adequately conveying the upstream stormwater flows safely downstream around these two subdivisions.

Cost Estimate/Funding Sources

Table 5.8: Thomas/Carson Estates Flooding Estimate and Funding Plan

Cost Estimate

Item	Cost
Alternatives Analysis	$5,000
Construction Drawing Preparation	$10,000
Construction	$100,000
Construction Management	$12,000
Total	**$127,000**

Table 5.8: Thomas/Carson Estates Flooding Estimate and Funding Plan			
Funding Source			
City	Grant	Developer	SDC
X	X	X	

Project Name: North Urban Growth Area (NUGA) Stormwater Basin Plan

Project ID: ULB 01

Watershed: Lacamas Lake

Basin: Upper Lacamas Basin

Location: NUGA (North of Lacamas Lake)

Description

The City's urban growth boundary includes an area on the north side of Lacamas Lake called the North Urban Growth Area (NUGA). The NUGA is bounded by NW Leadbetter Road and Lacamas Lake on the south, NE 232nd Avenue on the west, State Route 500/Everett Street on the east, and varying roads and properties on the north. The City will be developing a long-term plan for this area, including the establishment of detailed zoning and a street layout for arterials and collectors.

The city's planning effort for NUGA includes development of a stormwater basin plan that addresses water quality, flow control and conveyance. This plan will be designed to meet the City's recently adopted stormwater ordinance that follows the Stormwater Management Manual for Western Washington (SMMWW).

The City's code exempts Lacamas Lake from flow control requirements if the following criteria are met:

- The project site is drained by a conveyance system that is comprised entirely of manmade conveyance elements (e.g., pipes, ditches, outfall protection, etc.) and extends to the ordinary high water line of the exempt receiving water; and
- The conveyance system between the project site and the exempt receiving water shall have sufficient hydraulic capacity to convey discharges from future build-out conditions (under current zoning) of the site, and the existing condition from non-project areas from which runoff is or will be collected.

The conveyance systems for the NUGA area will be sized to carry undetained runoff so detention of stormwater will not be required.

There are multiple culverts under Leadbetter Road that convey runoff from the north side of the road to Lacamas Lake. If these culverts can convey runoff from the NUGA then flow control facilities will not be required. This project will determine the capacity of these

culverts and whether or not they need to be upsized to convey the runoff from the NUGA to the lake.

Lacamas Lake is on the state's 303(d) list for total phosphorus. Lake eutrophication occurs most summers and restoration efforts have focused on reducing phosphorus loadings. The City requires phosphorus treatment in the Lacamas watershed above the dam at the south end of Round Lake for all development sites exceeding one acre in size.

Proposed Project

This CIP is to provide funding for development of a stormwater basin plan for the NUGA. The stormwater master plan should include the following:

- An evaluation to determine the feasibility of using Low Impact Development BMPs in the study area. This determination should be made in conjunction with the development of road sections to determine if measures such as bioretion planters can be placed within the right-of-way for treating roadway stormwater.
- A list of runoff treatment BMPs to be used in the study area that meet SMMWW requirements, and the City's phosphorus requirement.
- Sizing of major stormwater conveyance pipes that serve multiple properties.
- An evaluation of the existing culverts under Leadbetter Road to determine their hydraulic capacity to convey the discharges from the estimated build-out of the NUGA area. Recommendations for upsizing the culverts should be included.

Cost Estimate/Funding Source

Table 5.9: NUGA Estimate and Funding Plan

Cost Estimate

Item	Cost
Alternatives Analysis/Conceptual Designs/Plan development	$100,000
Hydrologic and Hydraulic Modeling	$75,000
Total	$175,000

Funding Source

City	Grant	Developer	SDC
X	X	X	X

Project Name: Forest Home Road Sediment Basin

Project ID: BC 01

Watershed: Columbia River

Basin: Blue Creek

Location: Intersection of NW 10th Avenue and NW Ivy Drive

Description

Forest Home Road travels from the top of Prune Hill at NW Astor Street to NW 10th Avenue. This road drops close to 400 feet over less than a mile in length. A creek parallels Forest Home Road until it reaches NW 10th Avenue, where it enters a pipe. Because it is so steep and heavily vegetated, this creek carries a lot of sediment and debris, which collects at the entrance to this pipe. The City has built a sediment collection facility that allows them to excavate out this debris; they are called to this site to load out debris frequently during the winter months.

Proposed Project

Design a system for sediment and debris collection that will allow the entrance to the pipe to remain clear and requires city crews to clean the facility less frequently.

Cost Estimate/Funding Sources

Table 5.11: Forest Home Road Sediment Basin Estimate and Funding Plan

Cost Estimate

Item	Cost
Design	$25,000
Construction	$75,000
Total	**$100,000**

Funding Source			
City	Grant	Developer	SDC
X	X		

Project Name: Blue Creek Sediment Basin

Project ID: BC 02

Watershed: Columbia River

Basin: Upper Blue Creek

Location: Intersection of NW 10th Avenue and NW Drake Street

Description

Blue Creek travels steeply down the south east slope of Prune Hill until it reaches NW 10th Avenue, where it enters a pipe. Because it is so steep and heavily vegetated, this creek carries a lot of sediment, sticks, and debris with it, which collects at the entrance to this pipe. The City has built a sediment collection facility that allows them to excavate out this debris; they are called to this site to load out debris frequently during the winter months.

Figure 5-4: Sediment collection facility at Blue Creek.

Proposed Project

Design a system for sediment and debris collection that will allow the entrance to the pipe to remain clear and requires city crews to clean the facility less frequently.

Cost Estimate/Funding Sources

Table 5.12: Blue Creek Sediment Basin Estimate and Funding Plan

Cost Estimate	
Item	**Cost**
Design	$25,000
Construction	$75,000
Total	**$100,000**

Funding Source			
City	Grant	Developer	SDC
X	X		

Section 6—Financing

6.1 Introduction

The Camas stormwater utility was formed to fund the city's stormwater program and to meet their first NPDES permit requirements. The utility is responsible for the upkeep of the publicly-owned stormwater system, including conveyance pipelines, manholes, catch basins, detention ponds, and treatment systems. It is also responsible for street sweeping, as this is a regulatory requirement that reduces the amount of sediment that enters the City's creeks and streams (FCSG 2010). The utility collects monthly rates to fund operations and maintenance of the existing stormwater system and to fund capital improvements.

Historically, the Fisher Basin has had a stormwater utility fee collected to fund projects in that basin. However, with the formation of the new citywide utility, this fee was discontinued, and the funds collected will be retired in 2013.

A utility rate study conducted by Financial Consulting Services Group (FCSG) in 2009 set the stormwater utility rates from 2009 through 2013. Those rates were adopted by the city council, are included in CMC 13.89 and are shown in Table 6.1.

Table 6.1: Stormwater Utility Rates

2010	2011	2012	2013
$7.65	$8.49	$9.00	$9.27

The current rates do not have a large capital component built in to the structure. The FSCG 2009 rate study set the storm rate to cover the cost of the operation and maintenance of the existing storm system and modest amounts for replacement of existing infrastructure. As part of the Fisher Basin Utility, some capital dollars have been available but that account has been depleted. To provide a secure long term capital fund, the FSCG study proposed implementation of a System Development Charge (SDC) with a methodology consistent with the current water and sewer SDC. The rate would capture both historical costs and future capital needs. .

To be consistent with the water and sewer SDC, the SDC could be allocated at a rate of 67% Developer funded and 33% City. This breakdown accounts for the developer responsibility per code to install the minimum requirements for their development and allowing a credit or providing funding for the regional component. If Council chooses not to implement the SDC, other funds would be responsible to implement this capital plan.

Future versions of this plan will include a rate study that will be developed to ensure the future rate structure is suitable for continued funding of both O&M activities and capital construction projects.

Section 6—Financing

Continued

The city is scheduled to conduct a utility rate study in 2013. A policy decision should be made on funding critical stormwater system capital needs through adoption of SDC's or through rates. The utility currently has no debt associated with the rates.

Section 7—References

Boomazian & Heare, 2008. Memorandum: Clarification on which stormwater infiltration practices/technologies have the potential to be regulated as "Class V" wells by the Underground Injection Control Program. United States Environmental Protection Agency. June 13, 2008.

FCSG 2010. City of Camas; Final Report for Utilities Rate Study. January 2010.

DEA 2001(a). Phase I Fisher Basin Stormwater and Wetlands Master Plan. David Evans and Associates. July 13, 2001. (Camas Project No. S-370).

DEA 2001(b). Technical Memorandum for Long-Term Assessment of North Dwyer Creek. David Evans and Associates. February, 2001. (Camas Project No. S-370).

DEA 1998. North Dwyer Creek Master Plan. Technical Memorandum #1: Inventory of Existing Conditions. David Evans and Associates. October 14, 1998. (Camas Project No. S-370).

Ecology 2006. Guidance for UIC Wells that Manage Stormwater. Washington State Department of Ecology. Publication Number 05-10-067. December 2006.

Washington Department of Ecology UIC Website. Retrieved January 28th, 2013. http://www.ecy.wa.gov/programs/wq/grndwtr/uic/registration/reginfo.html.

MFI 2005. Fisher Basin Hydrologic and Hydraulic Analysis. Maul, Foster, and Alongi. October 4, 2005. (Camas Project No. S-456).

Appendices

Appendix A

Storm Facilities Maintained by City

otak

HenmiGlobal Partner

STORM FACILITIES MAINTAINED BY CITY

# FACILITIES MAINTAINED	ID #	FACILITY LOCATION	ADDRESS	DEPT. RESPONSIBLE	FACILITY TYPE	DATE FINALED
	6	Caribou Acres (nothing anymore)			Not scanned/no as-builts?	
1	7	Skyridge Middle School	5218 NW Parker Street	Street	Detention Pond - Dry	Jul-90
2	33	Knights Point	5214 NW 16th Circle	Street	Detention Pipe	
3	34	Lacamas Cove	216 NE 7th Circle	Street	Detention Pond - Dry	Dec-00
4	35	Lacamas Ridge		Street	Swale/Underground Det	Feb-78
5	43	Lake Heights - North	1515 NW 44th Avenue	Street	Ditch & Culvert	Oct-91
		Lake Heights - South	1425 NW 44th Avenue	Street	Ditch & Culvert	Dec-94
6	51	Operation Center	1620 SE 8th Avenue	Street	Detention Pond	
7	52	Parker Estates - West Entrance	3811 NW Knapp Lane	Street	Detention Pond	Aug-95
		Parker Estates - East Entrance	3441 NW Pacific Rim Drive	Street	Detention Pond	Aug-95
8	53	Parker Street	4310 NW Parker Street	Street	Ditch/Box Culvert	
9	54	Parker Street	4605 NW Parker Street	Street	Ditch/Box Culvert	
10	67	Skyline Estates	2800 NW McIntosh Road	Street	Ditch & Culvert	Aug-81
11	70	Stone Ridge	515 NW 24th Circle	Street	Treatment Vault	Mar-04
12	79	Sunset Court	2336 NW 28th Avenue	Street	Bioswale	Feb-95
13	88	Lacamas Summit	710 NE 42nd Circle	Street	Detention Pond	Mar-01
14	89	Lacamas Summit	555 NE 38th Avenue	Street	Detention Pond	Mar-00
15	91	COC Benton/Drake	?	Street	Detention Pond	
16	95	Lake Road Pond #4	2400 NW Lake Road	Street	Detention Pond	
17	96	Lake Road Pond #3	4975 NW Lake Road	Street	Wet Pond	
18	97	Westside Fire Station #42 East	4321 NW Parker Street	Parks	Wet Pond	
19	98	Westside Fire Station #42 West	4321 NW Parker Street	Parks	Wet Pond	
20	102	Holly Hills Phase 3	Behind 2450 NW 29th Ave.		Ditch Inlet & Culvert	Nov-98
21	111	Ash Creek Park	1905 NW Maryland Street	Parks	Detention Pond	Dec-04
22	124	Heritage Park (aka Lacamas Boat Launch)	NW Lake Road	Parks	Bioswale	Jan-05
23	125	Grass Valley Park	NE 38th Avenue	Parks	Detention Pond	Feb-05
24	17	Klickitat Park (aka Deer Creek Ph.7)	NW Klickitat Street	Parks	Wet Pond	Mar-05
25	127	Leadbetter Pond	NW Leadbetter Drive	Streets	Wet Pond	Apr-05

Appendix B

Cost Estimates

otak

HanmiGlobal Partner

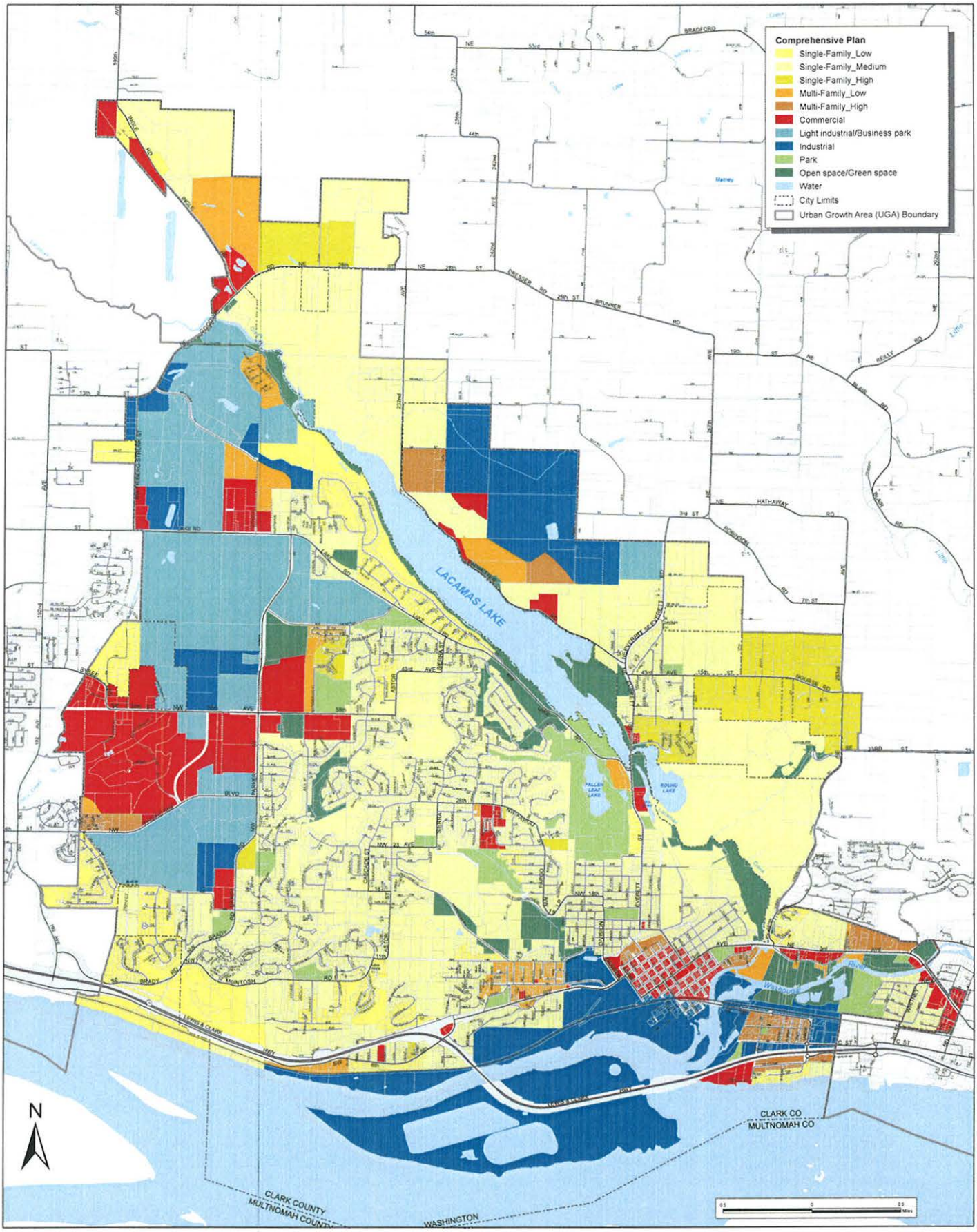
Julia Street Stormwater Pond Retrofit
Construction Estimate

ITEM	QUANTITY	UNIT	BID ITEM DESCRIPTION	UNIT PRICE	TOTAL
1	1	LS	MOBILIZATION (10 percent)	$13,571	$13,571
2	1	LS	SPCC PLAN	$500	$500
3	1	LS	CLEARING AND GRUBBING	$10,000	$10,000
4	1	LS	REMOVAL OF STRUCTURE AND OBSTRUCTION	$10,000	$10,000
5	5000	CY	ROADWAY EXCAVATION INCL. HAUL	$15	$75,000
6	40	TON	CRUSHED SURFACING BASE COURSE	$75	$3,000
7	1	LS	DEBRIS STRUCTURE	$20,000	$20,000
8	1	LS	DEWATERING	$50,000	$10,000
9	1	LS	TEMPORARY EROSION CONTROL (3 percent)	$3,855	$3,855
10	1	LS	LANDSCAPING RESTORATION (3 percent)	$3,855	$3,855
CONSTRUCTION SUBTOTAL					$149,781
30 percent contingency					$44,934
TOTAL CONSTRUCTION					$194,715
Sales Tax at 8.4%					$16,356
TOTAL ESTIMATED PROJECT COST					$211,071

Thomas/Carson Estates Flooding
Construction Estimate

ITEM	QUANTITY	UNIT	BID ITEM DESCRIPTION	UNIT PRICE	TOTAL
1	1	LS	MOBILIZATION (10 percent)	$6,151	$6,151
2	1	LS	SPCC PLAN	$500	$500
3	1	LS	CLEARING AND GRUBBING	$5,000	$5,000
4	1	LS	REMOVAL OF STRUCTURE AND OBSTRUCTION	$5,000	$5,000
5	500	CY	ROADWAY EXCAVATION INCL. HAUL	$15	$7,500
6	40	TON	CRUSHED SURFACING BASE COURSE	$75	$3,000
7	500	LF	STORM PIPE, 12-INCH	$75	$37,500
8	1	LS	TEMPORARY EROSION CONTROL (3 percent)	$1,755	$1,755
9	1	LS	LANDSCAPING RESTORATION (3 percent)	$1,755	$1,755
CONSTRUCTION SUBTOTAL					$68,161
30 percent contingency					$20,448
TOTAL CONSTRUCTION					$88,609
Sales Tax at 8.4%					$7,443
TOTAL ESTIMATED PROJECT COST					$96,052

Exhibit D- Camas Comprehensive Plan Map



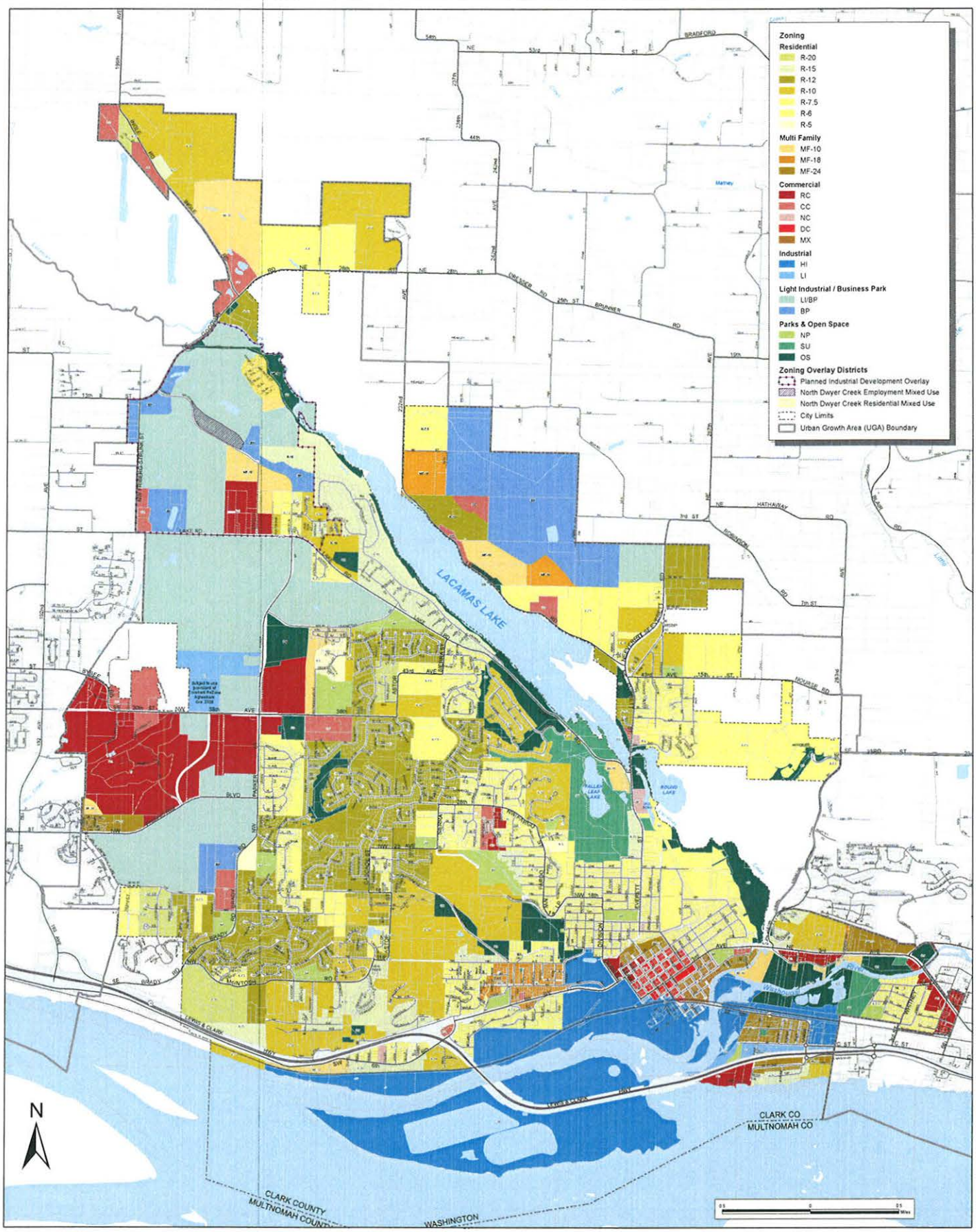
CAMAS COMPREHENSIVE PLAN

Ordinance #2678 (Adopted _____, 2013)

Note: Information on this map was collected from several sources. The City of Camas expressly disclaims liability for any inaccuracies that may be present. Users of this information should themselves check any details for accuracies.

Ordinance No. 2678

Exhibit E- Camas Zoning Map



CAMAS ZONING

Ordinance #2678 (Adopted _____, 2013)

Note: Information on this map was collected from several sources. The City of Camas expressly disclaims liability for any inaccuracies that may be present. Users of this information should themselves check any details for accuracies.

CITY OF CAMAS WASHINGTON

RESOLUTION NO. 1277

A RESOLUTION approving a Development Agreement between the City of Camas and multiple property owners collectively known as Lacamas Northshore.

WHEREAS, Mills Family, LLC, Shane T. and Melissa A. McGuffin, Eric J. and Amber F. Ware, Gail Gregg and Gerrick Weakley, David W. and Alexis R. Mason, Roy J. and Judy A. Ware, Edward and Jacqueline Sue Buma, Merle E. Cisney, Trustee of the Cisney Living Trust dated October 16, 1997, Robert A. and Debra S. Cisney, Johnston Dairy, LLC, and Edward C. Borowski are owners of certain real property located within the City of Camas (hereinafter referred to as "Lacamas Northshore"); and

WHEREAS, the City of Camas and Lacamas Northshore have negotiated a Development Agreement; and

WHEREAS, the Development Agreement sets forth certain development standards that will govern the development of the property; and

WHEREAS, the City Council has conducted a public hearing, as required by law, on the proposed Development Agreement, at which time it considered testimony from all interested parties; and

WHEREAS, the City Council finds that the Development Agreement has been reviewed by the Director of Community Development and has been found to meet all applicable planning requirements; and

WHEREAS, the City Council desires to approve the Development Agreement;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF CAMAS AS FOLLOWS:

Section I

That certain Development Agreement between the City of Camas and Lacamas Northshore, relating to certain real property located with the City's municipal boundary, is hereby approved, and the Mayor is authorized and instructed to sign the Development Agreement on behalf of the City.

Section II

The Development Agreement shall be recorded with the Clark County Auditor, pursuant to the requirements of RCW 36.70(B).190.

ADOPTED by the Council of the City of Camas and approved by the Mayor this 16th day of September, 2013.

SIGNED: _____
Mayor

ATTEST: _____
Clerk

APPROVED as to form:

_____
City Attorney

Return Address:

James D. Howsley, Esq.
Jordan Ramis, P.C.
1499 SE Tech Center Place #380
Vancouver, WA 98663

WASHINGTON STATE COUNTY AUDITOR/RECORDER'S
INDEXING FORM (Cover Sheet)
(RCW 65.04)

Please print or type information

Document Title(s) (or transactions contained therein):
Development Agreement Lacamas Northshore Properties

Reference Number(s) of Documents assigned or released:

☐ Additional reference #'s on page _____ of document.

Grantor(s) (Last name first, then first name and initials):
1. Mills Family, LLC, an Oregon limited liability company
2. McGuffin, Shane T. & Melissa A.
3. Ware, Eric J. & Amber F.
4. Gail Gregg and Gerrick Weakley
5. Mason, David W. & Alexis R.
6. Ware, Roy J. and Judy A.
7. Buma, Edward & Jacqueline Sue
8. Cisney, Merle E., Trustee of the Cisney Living Trust dated October 16, 1997
9. Cisney, Robert A. & Debra S.
10. Johnston Dairy, L.L.C., a Washington limited liability company
11. Borowski, Edward C.

☐ Additional names on page _____ of document.

Grantee(s) (Last name first, then first name and initials):
City of Camas

☐ Additional names on page _____ of document.

Legal Description (abbreviated: i.e. lot, block, plat or section, township, range):
PTN of SEC 27, SEC 34, & SEC 35, T2N, R3E, W.M.

☒ Additional legal is on page Exhibit A-1 & A-2 of document.

Assessor's Property Tax Parcel/Account Number:
175712-000; 175713-000; 175717-000; 175720-000; 175724-000; 175725-000; 175726-000; 175727-000; 175733-000; 175747-000; 175752-000; 175772-000; 177884-000; 177885-000; 177891-000; 177903-000; 177904-000; 178171-000; 178175-000;178180-000

☐ Assessor Tax # not yet assigned.

The Auditor/Recorder will rely on the information provided on the form. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.

DEVELOPMENT AGREEMENT
LACAMAS NORTHSHORE PROPERTIES

This Development Agreement ("Agreement") is made and entered into by and between the CITY OF CAMAS, a Washington municipal corporation (hereinafter referred to as the "City") and the undersigned property owners (hereinafter referred to as the "Owner" and collectively known as "Lacamas Northshore") and will be effective as of the last signed date below.

RECITALS

WHEREAS, the Lacamas Northshore own or control certain real property which is located within the City's municipal boundary and which is more fully described in the attached **Exhibit "A,"** commonly known as tax parcels 175712-000, 175713-000, 175717-000, 175720-000; 175724-000, 175725-000, 175726-000, 175727-000, 175733-000, 175747-000, 175752-000, 175772-000, 177884-000, 177885-000, 177891-000, 177903-000, 177904-000, 178171-000, 178175-000, and 178180-000 (hereinafter referred to as the "Property");

WHEREAS, the City wishes to provide for additional infrastructure planning and for the implementation of permanent zoning with respect to the Property;

WHEREAS, the City and Lacamas Northshore recognize this area will develop over a period of years and wish to provide predictability about the development standards that will apply to the area in order to increase efficient use of urban services and provide compatibility amongst the various properties within the area;

WHEREAS, the City is a Washington municipal corporation with land use planning and permitting authority over all land within its corporate limits;

WHEREAS, the Washington state legislature has authorized the execution of development agreements between local government and a person having ownership or control of real property within its jurisdiction pursuant to RCW 36.70B.170(1);

WHEREAS, pursuant to RCW 36.70B.170, a development agreement may set forth the development standards and other provisions that will apply to, govern and vest the development, use and mitigation of the development of real property for the duration specified in the agreement, which statute provides:

> (1) A local government may enter into a Development Agreement with a person having ownership or control of real property within its jurisdiction. A city may enter into a development agreement for real property outside its boundaries as part of a proposed annexation or a service agreement. A development agreement must set forth the development standards and other provisions that will apply to and govern and vest the development, use, and mitigation of the development of the

> real property for the duration specified in the agreement. A development agreement will be consistent with applicable development regulations adopted by a local government planning under chapter 36.70A RCW;

WHEREAS, the legislative findings supporting the enactment of this section provides:

> The legislature finds that the lack of certainty of the approval of development projects can result in a waste of public and private resources, escalate housing costs for consumers and discourage the commitment to comprehensive planning which would make maximum efficient use of resources at the least economic cost to the public. Assurance to a development project applicant that upon government approval the project may proceed in accordance with existing policies and regulations, and subject to conditions of approval, all as set forth in a development agreement, will strengthen the public planning process, encourage private participation and comprehensive planning, and reduce the economic cost of development. Further, the lack of public facilities and services is a serious impediment to development of new housing and commercial uses. Project applicants and local governments may include provisions and agreements whereby applicants are reimbursed over time for financing public facilities. It is the intent of the legislature by RCW 36.70B.170 through 36.70B.210 to allow local governments and owners and developers of real property to enter into development agreements;

WHEREAS, for the purposes of this Development Agreement, "development standards" includes, but is not limited to, all of the standards listed in RCW 36.70B.170(3); and

WHEREAS, this Development Agreement by and between the City and Lacamas Northshore relates to the zoning and future development of the Property.

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

Section 1. Development Agreement. This Agreement is a development agreement to be implemented under the authority of and in accordance with RCW 36.70B.170 through RCW 36.70B.210. It will become a contract between Lacamas Northshore and the City upon its approval by ordinance or resolution following a public hearing as provided in RCW 36.70B.170.

Section 2. Definitions. As used in this Agreement, the following terms, phrases, and words will have the meanings and be interpreted as set forth in this section.

"Adopting Resolution" means the resolution which approves this Agreement, as required by RCW 36.70B.200.

"Effective Date" means the effective date established by the Adopting Resolution.

Section 3. Term of Agreement. This Agreement will commence upon the Effective Date, and will continue in force for a period of seven (7) years, unless extended or terminated by mutual consent of the parties.

Section 4. Pre-Annexation Agreement. The parties agree that the Pre-Annexation Agreement dated May 22, 2008, and recorded against the Property under Clark County Auditor's No. 4458438 is completely superseded and replaced by this Agreement.

Section 5. The parties agree that the Development Agreement dated October 6, 2010 and recorded against the Property under Clark County Auditor's No. 4704846 is also replaced by and superseded by this Agreement.

Section 6. Conceptual Master Plan. Attached as **Exhibit "B"** is a Conceptual Master Plan. The purpose of the plan is to provide the Parties with predictability regarding the future development of the Property and provide the basis for the identification and implementation of zoning for the Property. Some areas will be zoned for employment uses as specified below in Section 6.1 and other areas will be zoned for residential consistent the Conceptual Master Plan (Exhibit B).

Section 6.1 Employment Uses. Attached as **Exhibit "C"** is a list of employment uses that is applicable to future development of the Property with Business Park zoning.

Section 6.2 Comprehensive Plan Designations and Zoning. As stipulated in Exhibit B the City has adopted Comprehensive Plan designations and zoning designations for each of the properties depicted. For some of the properties in Exhibit B planned and zoned as MF-18, the City and each owner agree to limit the number of units that can be built on each property as follows: For the MF-18 property presently owned by Edward and Jacqueline Buma (Parcel No. 175774-000) there will be a maximum number of units that can be built of 226 Units. For the MF-18 property currently owned by the Mills Family (Parcel No. 177885-000) there will be a maximum number of units that can be built of 207 Units. For the properties in Exhibit B planned and zoned as MF-10 (Parcel No. 177884-000), the City and the owner (the Mills Family) agree to limit the number of units that can be built to 150 Units.

Section 6.3 **Streetscape.** Lacamas Northshore agrees to incorporate into its development application submittal package streetscape standards for all streets within the Property. The streetscape standards should address street specifications, tree spacing and species, sidewalk separation, trash receptacles, benches and other street amenities that will create an inviting, safe passage for not only vehicular but pedestrian traffic. The Lacamas Northshore streetscape standards will be consistent with the streetscape standards provided for in **Exhibit "D."** At the time of application for development, the Owners shall further be required to meet the City minimum street standards in CMC 17.19 and the Camas Design Standards Manual.

Section 7. Medium Intensity Shoreline Area. . In consideration for the creation of the Medium Intensity Shoreline Area as shown on Exhibit "B" with the Comprehensive Plan designation of commercial and a zoning designation of community commercial , the owners of said property (the Mills Family) agree to dedicate in perpetuity to the City the two hundred foot wide strip of property from the ordinary high-water mark of Lacamas Lake depicted in Exhibit B as Open Space and/or future Park. Dedication under this section will occur concurrently with the recording of this Agreement.

Section 8. Significant Views. The properties owned by Lacamas Northshore border Lacamas Lake on the North. Lacamas Lake and the public areas surrounding it are an important scenic area that contributes to defining the character of the City of Camas. Lacamas Northshore recognizes and agrees that to the extent reasonable and as required by the Camas Municipal Code, development within the Lacamas Northshore area will be designed and implemented with the intent to preserve public views. The Camas Comprehensive Plan states that development should maintain compatible use and design with the surrounding built and natural environment when considering new development or redevelopment. The Comprehensive Plan states that the City should preserve the scenic aesthetic quality of public areas, public shoreline areas and public vistas to the extent feasible and reasonable. As such, any development application under this agreement will include a mitigation plan, prepared and reviewed in accordance with CMC 16.33, which meets the requirements of the Code. Compliance with this section will include, but not be limited to, review of any development application for consistency with the policies under CMC Section 16.33.010(B) and may be conditioned or denied to mitigate views impacts consistent with CMC Section 16.33.010. Further, any application for a Forest Resources Permit under RCW Chapter 76.09 for any property within the Lacamas Northshore area shall be subject to CMC 18.31.020(J) and comply with all additional requirements of CMC Chapter 18.31.

Section 9. New Road Arterial and Leadbetter Road Transition. The Owners and the City further recognize that it is the intent of the City, consistent with the Camas Parks and Recreation Plan, to create a new arterial through Lacamas Northshore to the north and Leadbetter Road will be converted or modified to establish a recreation corridor along the northshore of Lacamas Lake.

Section 10. Historic Houses. The City recognizes the significance of the historic house and associated buildings located on parcel 175720-000. The owners of parcel 177885-000 are also pursuing a historic designation with the State of Washington and Clark County for the house on this parcel. And while the properties will be regulated and developed in accordance with the applicable shoreline master program, the City will use best efforts, in their sole discretion, in working with the property owners to allow existing houses to remain in viable economic use, including but not limited to parking areas, trails, and access for motor vehicles to a public road or roads.

Section 11. Docks. Parcel Number 175720-000 is a parcel with a historic house. The City recognizes the Owner of this parcel wishes to reestablish a previously existing dock subject to shoreline approval.

Section 12. Farming Operations. Parcel numbers 175712-000, 175717-000, 175724-000, 175752-000, 175726-000, 175727-000, 175733-000, 175747-000, 175772-000, 177891-000, 178171-000, 178175-000, and 178180-000 are recognized as being in farming or ranching production and therefore classified as A/R under CMC 18.41.140. This Agreement will allow the Owners of the parcels identified in this section to maintain and expand farming uses on the parcels consistent with CMC 18.41 as stipulated at the time of execution of this Agreement.

Section 13. Remedies. Should a disagreement arise between the City and the Owners regarding the interpretation and application of this Agreement, the parties agree to attempt to resolve the disagreement by first meeting and conferring. If such meeting proves unsuccessful to resolve the dispute, the disagreement may be resolved by judicial action filed in Clark County Superior Court.

Section 14. Performance. Failure by either party at any time to require performance by the other party of any of the provisions hereof will in no way affect the parties' rights hereunder to enforce the same, nor will any waiver by a party of the breach hereof be held to be a waiver of any succeeding breach or a waiver of this non-waiver clause.

Section 15. Venue. This Agreement will be construed in accordance with and, governed by, the laws of the State of Washington. The parties agree to venue in the Superior Court for Clark County, State of Washington, to resolve any disputes that may arise under this Agreement.

Section 16. Severability. If any portion of this Agreement will be invalid or unenforceable to any extent, the validity of the remaining provisions will not be affected thereby.

Section 17. Inconsistencies. If any provisions of the Camas Municipal Code are deemed inconsistent with the provisions of this Agreement, the provisions of this Agreement will prevail.

Section 18. Binding on Successors and Recording. This Agreement will run with the land and be binding upon and inure to the benefit of the Owners, the parties, and their respective heirs, successors and assigns. This Agreement will be recorded against the real property identified in **Exhibit "A"** with the Clark County Auditor.

Lacamas Northshore may sell or otherwise lawfully dispose of any portion of the Property to another person who, unless otherwise released by all parties, will be subject to the applicable provisions of this Agreement related to such portion of the Property.

Section 19. Recitals. Each of the recitals contained herein are intended to be, and are incorporated as, covenants between the parties and will be so construed.

Section 20. Amendments. This Agreement may only be amended by mutual agreement of the parties.

Exhibits:

Exhibit A: Legal Description of Property
Exhibit B: Conceptual Master Plan
Exhibit C: Proposed Use List
Exhibit D: Streetscape Standards

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the dates set forth below.

CITY OF CAMAS

By: _____
Title_____

Parcel No. 175712-000 (McGuffin)

_____
Shane T. McGuffin
Date signed _____

_____
Melissa A. McGuffin
Date signed _____

Parcel No. 175717-000 (Ware, Eric & Amber)

_____
Eric J. Ware
Date signed _____

_____
Amber F. Ware
Date signed _____

Parcel Nos. 175720-000, 177884-000, 177885-000, 177903-000, 177904-000, (Mills Family, LLC)

MILLS FAMILY, LLC, an Oregon limited liability company

By: _____
John Ainsworth Mill, Jr., Member
Date signed _____

Parcel No. 175724-000 (Weakley Trust)

By: _____
Gail Gregg
Date signed _____

By: _____
Gerrick Weakley
Date signed _____

Parcel No. 175725-000 (Mason)

_____
David W. Mason
Date signed _____

_____
Alexis R. Mason
Date signed _____

Parcel No. 175752-000 (Ware, Roy & Judy)

_____
Roy J. Ware
Date signed _____

_____
Judy A. Ware
Date signed _____

Parcel No. 175772-000 (Buma)

_____
Edward Buma
Date signed _____

_____
Jacqueline Sue Buma
Date signed _____

Parcel No. 178171-000 (Cisney Living Trust)

By: _____
Merle E. Cisney, Trustee of the Cisney Living Trust dated October 16, 1997
Date signed _____

Parcel Nos. 178175-000, 178180-000
(Cisney)

_____
Robert A. Cisney
Date signed _____

_____
Debra S. Cisney
Date signed _____

Parcel Nos. 175726-000, 175727-000, 175733-000, 175747-000, 177891-000,
(Johnston Dairy, L.L.C.)

JOHNSTON DAIRY, L.L.C., a Washington limited liability company

By: _____
Leroy N. Johnston, Trustee of the Leroy N. Johnston Revocable Trust dated 12/30/97, Member
Date signed _____

By: _____
Lynn Johnston, Member
Date signed _____

By: _____
Rene M. Carroll, Member
Date signed _____

By: _____
Alison Johnston, Member
Date signed _____

Parcel No. 175713-000 (Borowski)

_____

Edward C. Borowski
Date signed _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the _____ of the City of Camas to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Shane T. McGuffin and Melissa A. McGuffin are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Eric J. Ware and Amber F. Ware are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that John Ainsworth Mill, Jr., is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the member of Mills Family, LLC, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Gail Gregg is the person who appeared before me, and said person acknowledged that she signed this instrument and acknowledged it to be her free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Gerrick Weakley is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that David W. Mason and Alexis R. Mason are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Roy J. Ware and Judy A. Ware are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Edward and Jacqueline Sue Buma are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Merle E. Cisney is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Trustee of the Cisney Living Trust dated October 16, 1997, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Robert A. Cisney and Debra S. Cisney are the persons who appeared before me, and said persons acknowledged that they signed this instrument and acknowledged it to be their free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Leroy N. Johnston is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Trustee of the Leroy N. Johnston Revocable Trust dated 12/30/97, member of Johnston Dairy, L.L.C., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Lynn Johnston is the person who appeared before me, and said person acknowledged that she signed this instrument, on oath stated that she was authorized to execute the instrument and acknowledged it as a member of Johnston Dairy, L.L.C., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Rene M. Carroll is the person who appeared before me, and said person acknowledged that she signed this instrument, on oath stated that she was authorized to execute the instrument and acknowledged it as a member of Johnston Dairy, L.L.C., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Alison Johnston is the person who appeared before me, and said person acknowledged that she signed this instrument, on oath stated that she was authorized to execute the instrument and acknowledged it as a member of Johnston Dairy, L.L.C., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

State of Washington)
) ss.
County of Clark)

I certify that I know or have satisfactory evidence that Edward C. Borowski is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: _____, 2013.

Notary Seal

_____
Notary Public for Washington

_____
Name of Notary

My appointment expires: _____

EXHIBIT A

LEGAL DESCRIPTION OF PROPERTY

The purpose of this legal description is to describe the area of land to be annexed to the City of Camas Washington. The described lands lie within a portion of Section 27, Section 34 and Section 35, Township 2 North, Range 3 East, Willamette Meridian, Clark County Washington being more particularly described as follows:

Commencing at the Section Corner common to Sections 21, 22, 27 and 28, Township 2 North, Range 3 East, Willamette Meridian; thence along the West line of said Section 27, South 01° 13' 20" West 1316.48 feet to the North 1/16 Corner on the West line of Section 27; thence departing said West line of Section 27 running along the North 1/16 line of Section 27, South 89° 06' 17" East 30.00 feet to a point on the East right-of-way of NE 232nd. Avenue, said point also being THE TRUE POINT OF BEGINNING; thence continuing along said North 1/16 line of Section27, South 89° 06' 17" East 2618.75 feet to the Center North 1/16 Corner of Section 27; thence along the Center line of Section 27, South 01° 43' 07" West 1325.65 feet to the Center ¼ Corner of Section 27; thence along the East 1/16 line of Section 27, South 88° 54' 28" East 2651.26 feet to the East ¼ Corner of Section 27; thence along the East line of Section 27, South 01° 51' 44" West 1876.12 feet; thence departing said East line of Section 27 North 88° 08' 16" West 40.00 feet to a point on the West right-of-way of NE 252nd. Avenue; thence along the West right-of-way of NE 252nd. Avenue, South 01° 51' 44" West 770.55 feet; thence departing said West right-of-way of NE 252nd. Avenue South 88° 55' 51" East 40.00 feet to the Section Corner common to Sections 26, 27, 34 and 35, Township 2 North, Range 3 East, Willamette Meridian; thence along the North line of said Section 35, South 88° 54' 43" East 1326.97 feet to the West 1/16 Corner of Section 35; thence South 01° 11' 49" West 1321.47 feet to the Northwest 1/16 Corner of Section 35; thence North 88° 49' 40" West 1323.92 feet to the North 1/16 Corner on the West line of Section 35, said point also being the Northeast Corner of Government Lot 6, Section 34, Township 2 North, Range 3 East, Willamette Meridian; thence along the North line of said Government Lot 6, North 88° 54' 39" West 1321.38 feet; thence continuing along the North line of Government Lot 6, North 88° 53' 47" West 880.01 feet; thence departing the North line of Government Lot 6, South 07° 26' 10" East 271.51 feet to a point on the Northerly right-of-way of Leadbetter Road; thence along the Northerly right-of-way of Leadbetter Road on the arc of a 2895.59 foot radius curve to the left, through a central angle of 2° 22' 54", (the long cord of which bears North 41° 37' 36" West, 120.36') an arc length of 120.36 feet to a point of tangency; thence continuing along said Northerly right-of-way, North 42° 39' 19" West 249.33 feet; thence departing said Northerly right-of-way, North 88° 53' 47" 93.68 feet to a point on the Northerly Shoreline of Lacamas Lake; thence along said Northerly Shoreline, North 46° 14' 00" West 351.03 feet; thence along said Northerly Shoreline, North 56° 05' 39" West 700.55 feet; thence along said Northerly Shoreline, North 29° 29' 12" West 61.48 feet; thence along said Northerly Shoreline, North 19° 42' 41" West 515.10 feet; thence along said Northerly Shoreline, North 29° 26' 23" West 91.60 feet; thence along said Northerly Shoreline, North 43° 21' 27" West 35.83 feet; thence along said Northerly Shoreline, North 56° 32' 27" West 259.52 feet; thence along said Northerly Shoreline, North 48° 33' 55"

West 340.16 feet; thence along said Northerly Shoreline, North 45° 16' 08" West 16.35 feet; thence departing said Northerly Shoreline, North 29° 14' 09" East 179.86 feet; thence South 54° 07' 51" East 145.10 feet; thence South 60° 55' 51" East 138.00 feet; thence South 67° 05' 51" East 173.60 feet; thence South 24° 25' 51" East 283.20 feet to a point on the South line of Section 27, said point is between the Southwest Corner of said Section 27 and the South ¼ Corner of said Section 27; thence along said South line of Section 27, South 88° 55' 51" East 146.20 feet; thence departing said South line of Section 27, North 01° 04' 09" East 60.00 feet; thence South 88° 55' 51" East 50.00 feet; thence South 01° 04' 09" West 60.00 feet to a point on the South line of Section 27, said point is between the Southwest Corner of said Section 27 and the South ¼ Corner of said Section 27; thence along said South line of Section 27, South 88° 55' 51" East 681.30 feet to the South ¼ Corner of Section 27; thence along the Center line of Section 27, North 01° 43' 07" East 1323.55 feet to the Center South 1/16 Corner of Section 27; thence along the Center South 1/16 line of Section 27, North 88° 55' 09" West 2625.77 feet to a point on the West line of Section 27, Township 2 North, Range 3 East, Willamette Meridian; thence along the West line of said Section 27, North 01° 13' 20' East 211.45 feet to a point on the Westerly right-of-way of Leadbetter Road; thence departing the West line of said Section 27 and departing the Westerly right-of-way of Leadbetter Road, North 80° 26' 19" East 60.00 feet to a point on the Easterly right-of-way of Leadbetter Road; thence along said Easterly right-of-way, North 09° 33' 41" West 103.52 feet to a point of curvature; thence along said Easterly right-of-way on the arc of a 541.07 foot radius curve to the right through a central angle of 10° 47' 00" (the long cord of which bears North 04° 10' 47" West 101.68 feet) an arc length of 101.83 feet to a point on the East right-of-way of Leadbetter Road; thence said East right-of-way North 01° 13' 20" East 2215.05 feet to THE TRUE POINT OF BEGINNING.

CONTAINS: 460.02 acres or 20,038,489 square feet more or less

The Basis of Bearing for this legal description is the line shown as South 01° 13' 20" West 2632.95 feet between the Section Corner common to Section 21, 22, 27 and 28, Township 2 North, Range 3 East, Willamette Meridian and the West ¼ Corner of Section 27, Township 2 North, Range 3 East, Willamette Meridian.

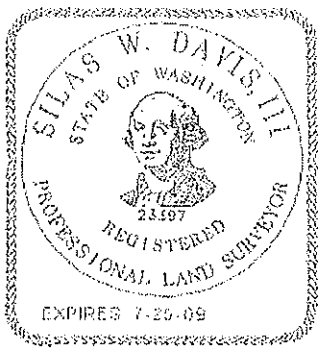


EXHIBIT B

CONCEPTUAL MASTER PLAN

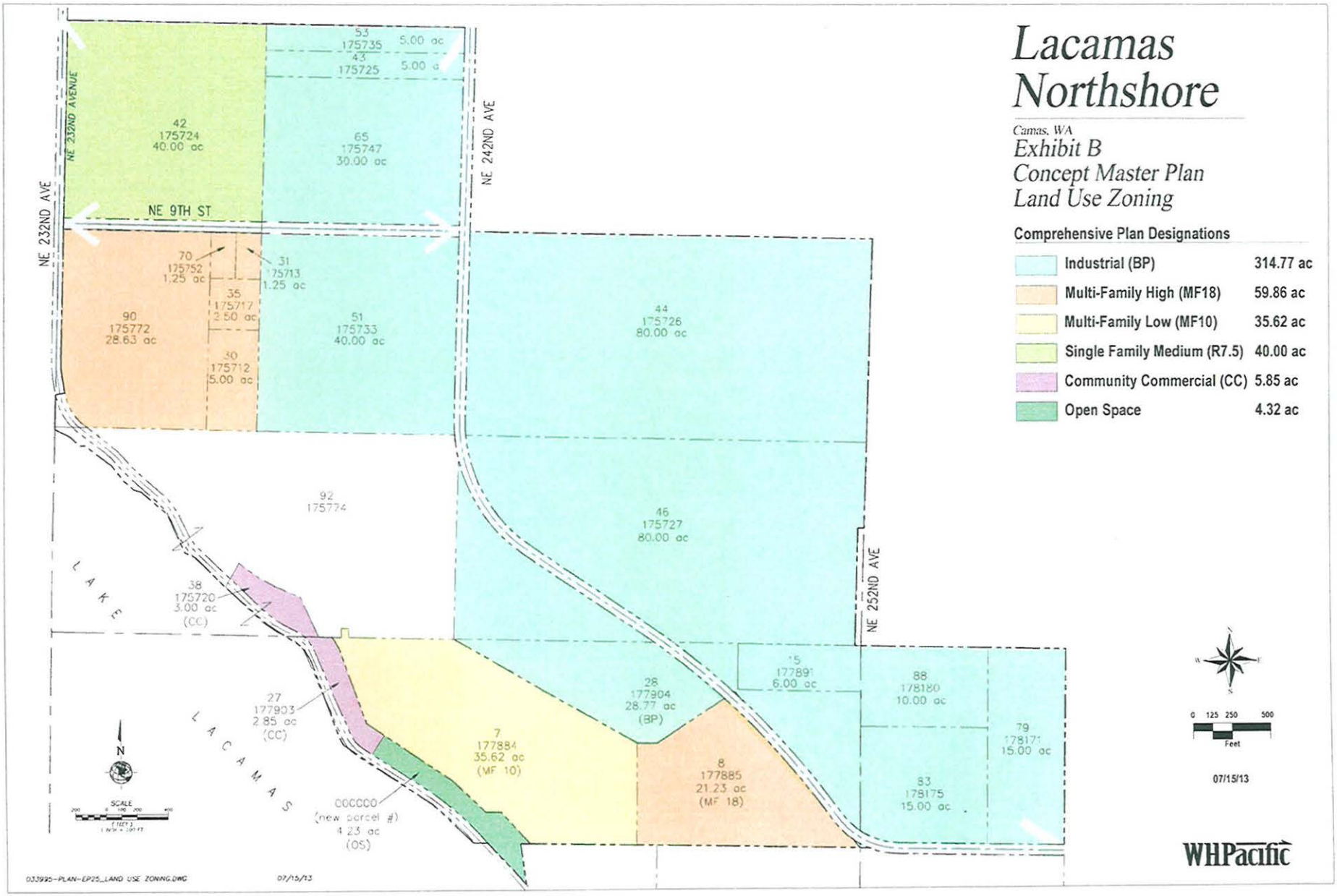

Lacamas Northshore
Camas, WA
Exhibit B
Concept Master Plan
Land Use Zoning
Comprehensive Plan Designations
Industrial (BP) 314.77 ac
Multi-Family High (MF18) 59.86 ac
Multi-Family Low (MF10) 35.62 ac
Single Family Medium (R7.5) 40.00 ac
Community Commercial (CC) 5.85 ac
Open Space 4.32 ac
NE 232ND AVE
NE 232ND AVENUE
NE 9TH ST
NE 242ND AVE
NE 252ND AVE
LAKE
LACAMAS
42 175724 40.00 ac
53 175735 5.00 ac
43 175725 5.00 ac
65 175747 30.00 ac
70 175752 1.25 ac
31 175713 1.25 ac
35 175717 2.50 ac
30 175712 5.00 ac
90 175772 28.63 ac
51 175733 40.00 ac
44 175726 80.00 ac
92 175774
46 175727 80.00 ac
38 175720 3.00 ac (CC)
27 177903 2.85 ac (CC)
28 177904 28.77 ac (BP)
15 177891 6.00 ac
88 178180 10.00 ac
79 178171 15.00 ac
7 177884 35.62 ac (MF 10)
8 177885 21.23 ac (MF 18)
83 178175 15.00 ac
000000 (new parcel #) 4.23 ac (OS)
0 125 250 500
Feet
07/15/13
WHPacific
033995-PLAN-EP25_LAND USE ZONING.DWG
07/15/13

EXHIBIT C

PROPOSED USE LIST

EXHIBIT C

BP ZONE USE LIST (per Ordinance 2672)

Zoning Districts	BP
Animal kennel, commercial/boarding[6]	C
Animal shelter[6]	C
Antique shop[6]	C
Appliance sales and service[6]	P
Automatic teller machines (ATM)[6]	P
Automobile repair (garage)[6]	P
Automobile sales, new or used[6]	P
Automobile service station[6]	P
Automobile wrecking[6]	X
Bakery (wholesale)[6]	P
Bakery (retail)[6]	P
Banks, savings and loan	P
Barber and beauty shops[6]	P
Boat building[6]	C
Boat repair and sales[6]	P
Book store[6]	P
Bowling alley/billiards[6]	P
Building, hardware and garden supply store[6]	P
Bus station[6]	P
Cabinet and carpentry shop[6]	P
Candy; confectionery store[6]	P
Cart vendors[6]	P
Cemetery[6]	X
Clothing store[6]	P
Coffee shop or cafe[6]	P
Convention center[6]	P
Day care center[6]	C
Day care, adult	P
Day care, family home[6]	X
Day care, mini-center[6]	P
Delicatessen (deli)[6]	P
Department store[6]	P
Equipment rental[6]	P
Event center	P

Feed store[6]	C
Fitness center/sports club[6]	P
Funeral home[6]	X
Florist shop[6]	P
Food delivery business[6]	P
Furniture repair; upholstery[6]	P
Furniture store[6]	P
Gas/fuel station[6]	P
Gas/fuel station with mini market[6]	P
Grocery, large scale[6]	C[8]
Grocery, small scale[6]	P
Grocery, neighborhood scale[6]	P
Hospital, emergency care[6]	P
Hotel, motel[6]	P
Household appliance repair[6]	P
Industrial supplies store[6]	C
Laundry/dry cleaning (industrial)	X
Laundry/dry cleaning (retail)[6]	P
Laundry (self-serve)	P
Liquor store[6]	C
Machine shop[6]	C
Medical or dental clinics (outpatient)[6]	P
Mini-storage/vehicular storage[6]	P
Manufactured home sales lot[6]	X
Newspaper printing plant[6]	X
Nursery, plant[6]	C
Nursing, rest, convalescent, retirement home[6]	X
Office supply store[6]	X
Pawnshop[6]	X
Parcel freight depots[6]	P
Pet shops[6]	P
Pharmacy[6]	P
Photographic/electronics store[6]	P
Plumbing, or mechanical service[6]	P
Printing, binding, blue printing[6]	P
Professional office(s)[6]	P
Public agency[6]	P
Real estate office[6]	P

Recycling center[6]	X
Recycling collection point[6]	C
Recycling plant[6]	X
Research facility[6]	P
Restaurant[6]	P
Restaurant, fast food[6]	P
Roadside produce stand[6]	X
Sand, soil, gravel sales and storage[6]	X
Second-hand/consignment store[6]	P
Sexually Oriented Business[1,5]	X
Shoe repair and sales[6]	P
Stock broker, brokerage firm	P
Specialty goods production (e.g. brew pub)	P
Taverns[6]	P
Theater, except drive-in[6]	P
Truck terminals[6]	X
Veterinary clinic[6]	P
Video rental store[6]	P
Warehousing, wholesale and trade[6]	P
Warehousing, bulk retail[6]	X
Cotton, wool, other fibrous material	P
Food production or treatment	P
Foundry	X
Furniture manufacturing	C
Gas, all kinds (natural, liquefied)	X
Gravel pits/rock quarries	X
Hazardous waste treatment—Off-site	X
Hazardous waste treatment—On-site	X
Junkyard/wrecking yard	X
Metal fabrication and assembly	C
Hazardous waste treatment—On-site	X
Paper, pulp or related products	X
Signs or other advertising structures	C
Electronic equipment	X
High-tech industry	P
Manufacturing of miscellaneous goods (e.g. musical instruments, toys, vehicle parts)	X
Optical goods	P

Packaging of prepared materials	C
Scientific and precision instruments	P
Auditorium[6]	P
Community club[6]	P
Church[6]	P
Golf course/driving range[6]	P
Library[6]	P
Museum[6]	P
Recreational vehicle park[6]	X
Open space[6]	P
Park or playground	P
Sports fields[6]	P
Trails	P
College/university[6]	P
Elementary school[6]	P
Junior or senior high school[6]	P
Private, public or parochial school[6]	P
Trade, technical or business college[6]	P
Adult family home	X
Assisted living	X
Bed and breakfast	X
Designated manufactured home	X
Duplex or two-family dwelling	X
Group home	X
Home occupation	X
Housing for the disabled	X
Apartment	X
Residence accessory to and connected with a business	X
Single-family attached (e.g. rowhouses)	X
Single-family dwelling	X
Major telecommunication facility[6]	X
Minor telecommunication facility	P
Wireless communications facility[3,6]	
Facilities, minor public	P
Facility, essential[6]	C
Railroad tracks and facilities[6]	X
Temporary sales office for a development[4]	T

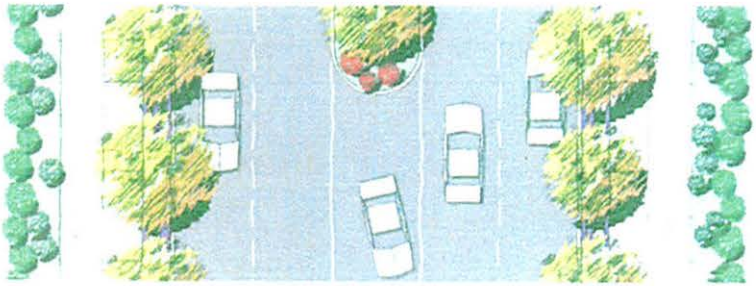
EXHIBIT D

STREETSCAPE STANDARDS

Lacamas Northshore

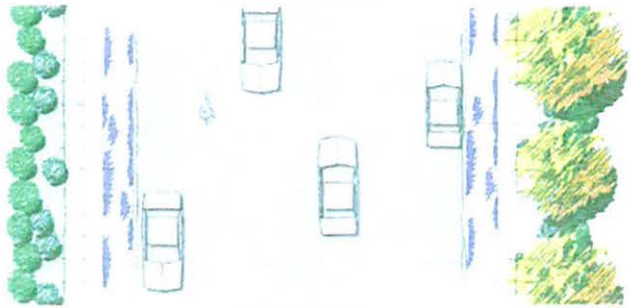
Camas, WA.

Arterial Roadway Section



Arterial Roadway Plan

Local Roadway Section



Local Roadway Plan

Collector Roadway Section

Collector Roadway Plan

05-18-09

KIMBAL LOGAN

WHPacific

RESOLUTION NO. 1278

A RESOLUTION setting a public hearing concerning the proposed vacation of a portion of right-of-way on SW 6th Avenue

WHEREAS, the City has received a request from Burlington Northern Santa Fe Railroad (BNSF) to vacate a portion of the right-of-way on SW 6th Avenue, also known as the Old Evergreen Highway, and

WHEREAS, the portion of said right-of-way to be vacated is abutted solely by properties owned by BNSF, and

WHEREAS, the Council of the City of Camas desires to initiate vacation proceedings for the right-of-way to be vacated, and

WHEREAS, it is necessary for the Council to fix a time and place for a public hearing to be held on the proposed right-of-way vacation.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL FOR THE CITY OF CAMAS AS FOLLOWS:

Section I

The Council of the City of Camas does hereby initiate proceedings to vacate the following described portion of public right-of-way described in Exhibit "A" and depicted in Exhibit "B" attached hereto and by this reference incorporated herein.

Section II

A public hearing shall be held on the proposed vacation on the 21st day of October 2013, at 7:00 p.m. in the Council Chambers of the Camas Municipal Center.

Section III

The City Clerk is directed to give twenty (20) days notice of the hearing by posting written notice in three of the most public places in the City of Camas, by posting a like notice on that portion of the street to be vacated, and by mailing notice to the abutting property owners at least (15) days prior to the date of hearing.

ADOPTED at a regular session of the City Council of the City of Camas this 16th day of September 2013.

SIGNED: _____
Mayor

ATTEST: _____
Clerk

APPROVED as to form:

_____
City Attorney

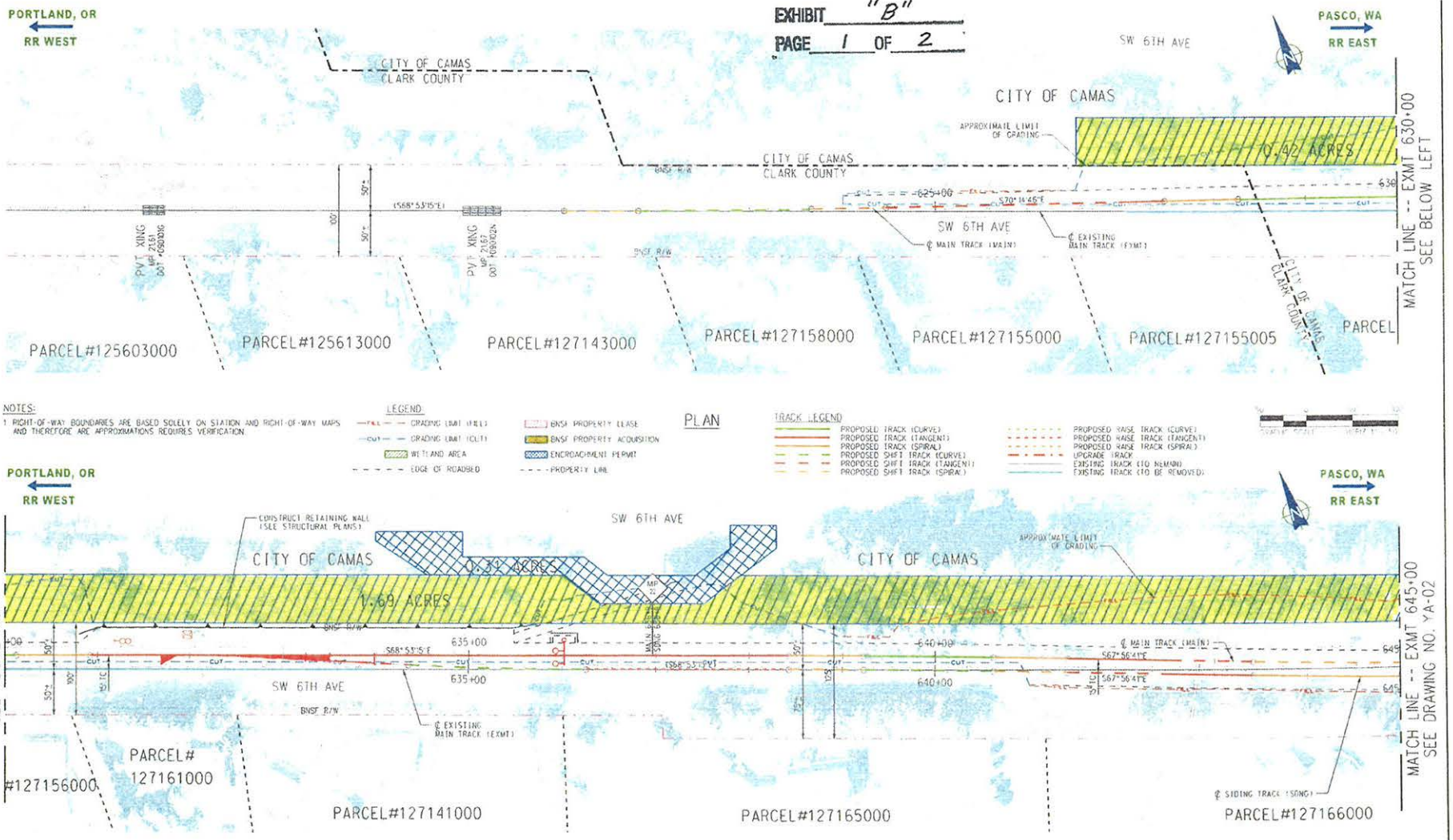
EXHIBIT "A"

The southern 50 feet of public right-of-way tract known as SW 6th Avenue, also known as the Old Evergreen Highway, located in the Southeast Quarter of Section 8 and Southwest Quarter of Section 9, Township 1 North, Range 3 East, Willamette Meridian, Clark County, City of Camas, Washington, its center line more particularly described as follows:

Beginning 350 feet, more or less, west of the east line of said Section 8, and 25 feet, more or less, north of the south line of said tract; thence easterly along a line 25 feet north of and parallel with said south line a distance of 1,900 feet, more or less; Excluding gravel roadways.

Said public right-of-way tract, more precisely depicted in Exhibit "B", contains 2.2 acres, more or less.

EXHIBIT "B"
PAGE 1 OF 2



NOTES:
1 RIGHT-OF-WAY BOUNDARIES ARE BASED SOLELY ON STATION AND RIGHT-OF-WAY MAPS AND THEREFORE ARE APPROXIMATIONS REQUIRES VERIFICATION.

LEGEND
- FILL — GRADING LIMIT (FILL)
- CUT — GRADING LIMIT (CUT)
- WETLAND AREA
- EDGE OF ROADBED
- BNSF PROPERTY LEASE
- BNSF PROPERTY ACQUISITION
- ENCROACHMENT PERMIT
- PROPERTY LINE

PLAN

TRACK LEGEND
- PROPOSED TRACK (CURVE)
- PROPOSED TRACK (TANGENT)
- PROPOSED TRACK (SPIRAL)
- PROPOSED SHIFT TRACK (CURVE)
- PROPOSED SHIFT TRACK (TANGENT)
- PROPOSED SHIFT TRACK (SPIRAL)
- PROPOSED RAISE TRACK (CURVE)
- PROPOSED RAISE TRACK (TANGENT)
- PROPOSED RAISE TRACK (SPIRAL)
- UPGRADE TRACK
- EXISTING TRACK (TO REMAIN)
- EXISTING TRACK (TO BE REMOVED)

NOT FOR CONSTRUCTION
100% SUBMITTAL

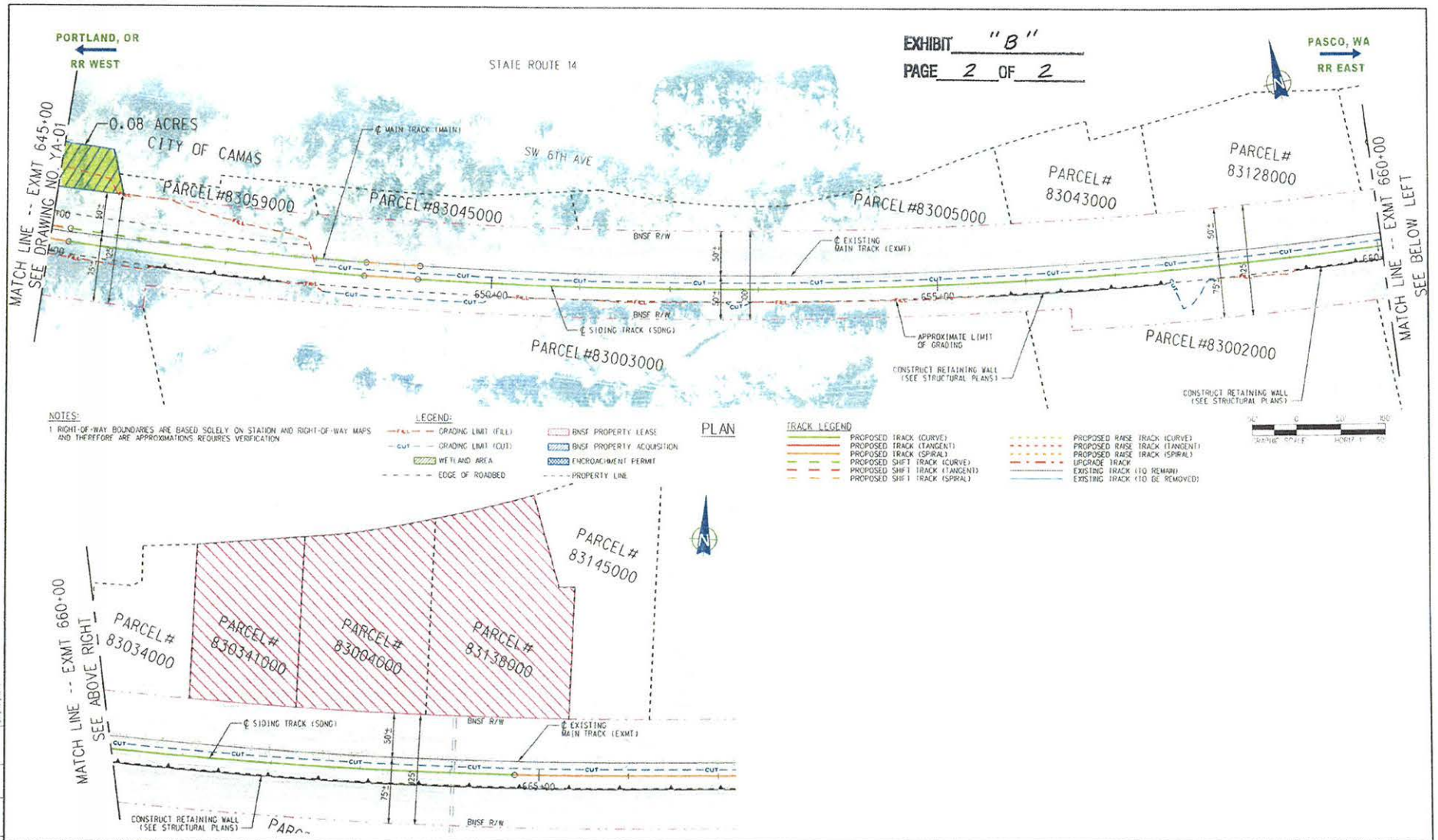
BNSF RAILWAY

PATTERSON & ASSOCIATES, INC

BNSF RAILWAY CO.
FALLBRIDGE WEST TRACK IMPROVEMENT PROJECT
CAMAS SIDING
RIGHT-OF-WAY EXHIBIT - SHEET 1 OF 2
EXMT 619+00 TO EXMT 645+00
MP 21.66 TO MP 22.12

DRAWING NO. YA-01
SHEET NO. 51
SCALE: AS SHOWN

EXHIBIT "B"
PAGE 2 OF 2



NOT FOR CONSTRUCTION
100% SUBMITTAL

REV. | DATE | DESCRIPTION | BY | APP

DESIGNED BY: M. SITTERS
DRAWN BY: M. SITTERS
CHECKED BY: R. PORTER
MANAGED BY: M. SIMMS
DATE: JUNE 28, 2013

BNSF RAILWAY

PATTERSON & ASSOCIATES, INC. 325 TOWN & COUNTRY NO. SUITE 330 ORANGE, TX 77630

BNSF RAILWAY CO.
FALLBRIDGE WEST TRACK IMPROVEMENT PROJECT
CAMAS SIDING
RIGHT-OF-WAY EXHIBIT - SHEET 2 OF 2
EXMT 645+00 TO EXMT 667+00
MP 22.12 TO MP 22.53

CONTRACT NO.
DRAWING NO. YA-02
REVISION
SHEET NO. 52
SCALE AS SHOWN