

CITY OF BLACK DIAMOND
BLACK DIAMOND PLANNING COMMISSION
NOTICE OF REMOTE PUBLIC HEARINGS

NOTICE IS HEREBY GIVEN that two (2) virtual/telephonic **Public Hearings** will be held by the Black Diamond Planning Commission **on August 10, 2021, at 6 p.m.**, which may be attended telephonically or online through the Zoom meeting application. The public is encouraged to participate by 1) calling 253-215-8782 and entering Meeting ID# 425 415 7187, Password 941820 to listen to the proceedings telephonically; or 2) joining the meeting by Zoom link

<https://zoom.us/j/4254157187?pwd=RE9OV0VoU1RFc3psSHdjem9mMk9hdz09>

Meeting ID# 425 415 7187, Password PC.

The Black Diamond Planning Commission will solicit comments regarding the following:

- 1) Amendments to Comprehensive Plan Appendix 7 (Transportation) to reflect an alternative SE Loop Connector Route.
- 2) Prepare a feasibility study, including costs and scope of operations, on conducting an Ecological Inventory in the City.

If you wish to speak during either of the Public Hearings, you must provide your name, email address and which Public Hearing you will be speaking at to the Deputy City Clerk at cthornquist@blackdiamondwa.gov by **12 p.m. on Tuesday, August 10, 2021** so that the remote legislative public hearing protocols can be emailed to you prior to the start of the meeting. Alternatively, written comments on these topics can be submitted to mdavis@blackdiamondwa.gov by 2:00 p.m. on August 10, 2021. All documents related to these hearings will be available here by 5 p.m. on August 3rd.

Dated this 22nd day of July 2021

Carina Thornquist

Deputy City Clerk



CITY OF BLACK DIAMOND PLANNING COMMISSION AGENDA August 10, 2021

**THIS IS OFFERED AS A ZOOM MEETING ONLY.
CALL IN AND JOINING INFORMATION FOLLOWS:**

Zoom link to join meeting:

<https://zoom.us/j/4254157187?pwd=RE9OV0VoU1RFc3psSHdjem9mMk9hdz09>

(Note: You do not need a web cam to join the meeting, but you will need audio to hear the proceedings.)

Meeting ID: 425 415 7187

Password: PC

Telephone dial in options:

+1 253 215 8782 US (Tacoma)

+1 206 337 9723 US (Seattle)

Meeting ID: 425 415 7187

Password: 941820 (phone in only)

6:00 P.M. - CALL TO ORDER, FLAG SALUTE, AND ROLL CALL

APPROVAL OF MINUTES:

- 1) Regular Planning Commission Meeting on July 13, 2021

PUBLIC COMMENTS: Persons wishing to address the Planning Commission regarding items of new business are encouraged to do so at this time. Please use the "raise your hand" feature and once recognized by the Chair, you may unmute and state your name and city for the record. Please limit your comments to 3 minutes. For those dialing in, please press *9 to raise your hand and *6 to unmute yourself.

PUBLIC HEARING: If you wish to speak during the Public Hearing, you must provide your name, email address and which hearing you would like to speak to the Deputy City Clerk at cthornquist@blackdiamondwa.gov by **12 p.m. on Tuesday, August 10, 2021** so that the remote legislative hearing protocols can be emailed to you prior to the start of the meeting. Alternatively, written comments on this topic can be submitted to mdavis@blackdiamondwa.gov by **2:00 p.m. on August 10, 2021.**

- 2) **(RESCHEDULED TO SEPTEMBER 7, 2021)** Prepare a feasibility study, including costs and scope of operations, on conducting an Ecological Inventory in the City.
- 3) Amendments to Comprehensive Plan Appendix 7 (Transportation) to reflect an alternative SE Loop Connector Route.

STUDY/WORK SESSION: August 24, 2021 – FLUM/Zoning Presentation

UNFINISHED BUSINESS:

NEW BUSINESS:

COMMUNITY DEVELOPMENT DEPARTMENT REPORT:

PUBLIC COMMENTS: Persons wishing to address the Planning Commission regarding items of new business are encouraged to do so at this time. Please use the "raise your hand" feature and once recognized by the Chair, you may unmute and state your name and city for the record. Please limit your comments to 3 minutes. For those dialing in, please press *9 to raise your hand and *6 to unmute yourself.

ADJOURN:

This site is barrier free. People needing special assistance or accommodations should contact the Community Development Department 72 hours in advance of the meeting at (360) 851-4447



CITY OF BLACK DIAMOND
PLANNING COMMISSION SPECIAL MEETING MINUTES
July 13, 2021, 6:00 PM
Zoom Virtual Meeting

1) FLAG SALUTE, CALL TO ORDER, and ROLL CALL:

Chair Olson called the meeting to order at 6:01 p.m.

Present: Chair/Commissioner John Olson
Commissioner Richard La Conte
Commissioner Crystal Perez
Commissioner Pam McCain
Commissioner Felicia Wheatfall (joined @ 6:05 p.m.)
Commissioner Dave Ambur

Excused: Commissioner Steve Jensen

Staff: Community Development Director, Mona Davis
Deputy City Clerk, Carina Thornquist

2) APPROVAL OF MINUTES - None

3) PUBLIC COMMENTS - None

4) PUBLIC HEARINGS -

a) *Senior Housing Code Amendments* –

Chair Olson introduced Community Development Director Mona Davis and asked her to give the staff presentation. She gave a brief overview of reducing the senior age from 65 years old to 55 years old and recommended including “cottage housing” which she explained in further detail. She said there are three (3) types of housing exemptions and the HUD specifically states that 55 years and older is the most common of the three (3) types of exemptions. Director Davis answered questions from the Commissioners and provided clarification where needed.

Chair Olson opened the Public Hearing at 6:04 p.m. He asked the Commissioners if they had any clarifying questions for Director Davis. The Commissioners asked multiple questions which Director Davis provided answers to. Chair Olson stated that there will be time after the public speaks for the Commissioners to discuss this topic some more before making decisions.

Director Davis stated that Commissioner Wheatfall joined the meeting and Chair Olson stated that her arrival was documented at joining at 6:05 p.m.

Chair Olson opened up the public speaking portion at 6:16

Jeff Potter of Integrity Land in Maple Valley and resident of Black Diamond – Mr. Potter started by stating that he and his company concur with changing the age to 55 years old. When his company started the permit process a couple of years ago for the Tamarack development, they were told the age for senior housing was 65 years old but the City was working on changing it and updating that code. Jeff stated that all the agencies that their company works with use the age of 55 as it's the standard and is mostly used now by HUD. Traffic analysis that was used for trip count generation for the Tamarack Development was based on the ITE Manual which is an international manual for traffic count generation based on particular land use. When their company submitted information back in 2019 for their permit, all of the numbers that they put in and were based off the ITE Manual for 55 years old persons. Jeff stated that younger persons could possibly reside there but there are no amenities for younger kids so therefore, they usually would prefer not to reside in such an area. He said they don't come across that very often. In addition, he said typically there are rules in most of these facilities. Residents do not pay school impact fees and the nature of the project dictates that. Jeff stated that as it stands now with COBD requiring 65 as the age limit for seniors, it poses a negative impact on the City and it's residents by limiting the opportunities for a large number of seniors from purchasing or residing in senior housing. Since 55 is mostly the standard, those persons will typically look elsewhere first and potentially eliminate Black Diamond from their selection. Lowering the age to 55 and older will provide more options for the citizens and ultimately the City of Black Diamond.

Kristen Bryant from Bellevue - Kristen stated that she sent an email to the Commissioners on Monday with her concerns. She stated that looking at the code that it's not that simple to just changing the age, there are a couple of things to consider prior to reducing the age to 55 years old. Currently with Black Diamond's code of 65 years old, it says that at least one (1) person in the household must be that age. This means that their spouse might be significantly younger. If the age is changed to 55 years old, there's a good possibility that they are not retired but still working which means a contributing factor to the traffic problems. Another concern would be that there would be one person of age and then perhaps move in their much younger family members. Ms. Bryant stated that the City Council has repeatedly expressed interest in

being eligible for Regional Transportation Funding which is controlled by the Puget Sound Regional Council (PSRC). Because Black Diamond's growth is above the county's target and forecasts, the PSRC has asked Black Diamond not to take actions to further increase growth above those targets, and has asked Black Diamond to do more to mitigate traffic. Ms. Bryant feels making this change from 65 years old to 55 years old actually does the opposite and a compromise should be looked at.

Chair Olson asked if there were any further public testimony regarding the Senior Housing Code Amendments. **Hearing and Seeing none**, Chair Olson **Closed** the Public Hearing regarding the Senior Housing Code Amendments at 6:29 p.m.

Chair Olson opened it up for the Commissioners to ask the Director any questions they may have on either of the topics, or to have general discussion. Director Davis gave clarification on Senior Housing concerns. Back and forth discussion, as well as questions took place between the Director and the Commissioners. Chair Olson stated that Commissioner Wheatfall shared a document from Seattle King County on aging and disability (dated 2009) which specifically addressed the projected housing crisis through 2025 for seniors 55 years and older. Further extensive discussion took place between Chair Olson, the Commissioners and Director Davis.

Chair Olson said he would entertain a motion to recommend the senior code amendments as heard tonight by city staff to forward to City Council.

Commissioner Wheatfall **Motioned** to change the age of senior housing from 65 years old to 55 years old and have it forwarded and presented to City Council. **Second** Commissioner McCain. **Vote by Roll Call**, Commissioner LaConte-no, Commissioner Perez-yes, Commissioner McCain-yes, Commissioner Wheatfall-yes, Commissioner Ambur-no, Commissioner Olson-no, Motion **Failed** 3-3 (LaConte, Ambur and Olson.)

Commissioner Ambur started to make a **Motion** but then changed his mind and withdrew his motion.

Commissioner Olson **Motioned** to change the age from 65 years old to 62 years old instead of 55 years old. **Second** None. **Motion** failed.

Continued extensive discussion took place amongst the Commissioners and Director Davis of all elements of senior housing. Chair Olson expressed the importance of moving this amendment to the City Council. He also stated that the Planning Commission has a responsibility to the citizens to look into all aspects of how this will affect the City of Black Diamond and the seniors, favorable and unfavorable. Chair Olson added that all of the research needs to be completed before making final decisions. Finally, he stated that he would change his vote to be in favor of this change requesting Director Davis to express

the views and concerns of the Planning Commission and strongly request that the City Council will do thorough research on both sides before making any decisions.

Commissioner Wheatfall **Motioned** to re-enter the original motion to propose to the City Council the age change from 65 years and older senior housing to 55 years and older senior housing and all of the other details outlined in the Senior Housing Code Amendment presented by Director Davis. **Second** Commissioner McCain. **Vote by Roll Call**, Commissioner LaConte-no, Commissioner Perez-yes, Commissioner McCain-yes, Commissioner Wheatfall-yes, Commissioner Ambur-no, Commissioner Olson-yes, Motion **Passed** 4-2 (LaConte and Ambur)

b) Fences, Hedges and Walls Code Amendments –

Chair Olson opened the floor to the Commissioners for discussion of the Fences, Hedges and Walls Code Amendments. Director Mona Davis gave a brief overview of Fences, Hedges and Walls Code Amendments. Director Davis answered questions from the Commissioners and provided clarification where needed.

Chair Olson opened the Public Hearing for Fences, Hedges and Walls Code Amendments at 6:33 p.m. and asked if there was anyone wanting to speak. The Chair asked three (3) times before closing the Public Hearing for the Fences, Hedges and Walls Code Amendments at 6:34 p.m..

Chair Olson said he would entertain a motion to take the Fences, Hedges and Walls Code Amendments to City Council. Hearing no one,

Discussion of Fences, Hedges and Walls took place between the Commissioners and Director Davis.

Chair Olson said he would entertain a motion to move the Fences, Hedges and Wall Code Amendments to City Council. No motion was made by Commissioners. Chair Olson advised Director Davis that this Amendment will not move forward to the City Council.

5) STUDY/WORK SESSION - None

6) UNFINISHED BUSINESS -

a) Discussion of work plan for remainder of 2021 – Director Davis reported on the following items that will be researched, discussed and worked on for the remainder part of the year. Those items include: the 2021 Docket, which entails review of the Zoning Map and Future Land Use Map; Transportation element to the Comp. Plan and an alternate to the SW Connector Loop; the Housing element to the Comp. Plan; the Parks Plan (PROS); Marijuana; and ecological

inventory study cost analysis. Director Davis suggested scheduling extra meetings on August 24, September 21 and October 26 to handle the workload prior to the end of the year.

Commissioner Ambur **Motioned** to add a second meeting a month for August 24, September 21 and October 26. **Second** Commissioner Perez. **Vote**, Motion **passed** 6-0.

7) **PUBLIC COMMENTS** – None

8) **COMMUNITY DEVELOPMENT DEPARTMENT REPORT** –

Director Davis reported briefly on the staffing of the Community Development office stating that Joey Portmann was promoted from Permit Tech/Asst. Planner to Sr. Planner. Jill Kuzaro has moved positions from Administrative Asst. in the City Hall Bldg. to the Permit Tech. Position. Director Davis has requested to extend the on-call senior planner's contract to assist the department with the docket and other senior planner duties.

9) **ADJOURNMENT** –

Commissioner Ambur **Motioned** to adjourn the meeting. **Second** Commissioner Wheatfall. **Vote**, Motion **passed** 6-0.

The meeting ended at 8:02 p.m.

These minutes were respectively recorded by Carina A. Thornquist, Deputy City Clerk

ATTEST:

John Olson, Chairperson

Planning Commission Secretary



CITY OF BLACK DIAMOND

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Meeting Date: August 10, 2021
Staff Report Date: August 3, 2021
To: Planning Commissioners
From: Mona Davis, Community Development Director
Subject: Comprehensive Plan Amendments – Economic Development Policy

The purpose of this brief is to go over final docket item #2021-17: “Delete policy ED-4.5 from the Economic Development Chapter or move it to the Transportation Chapter.”

Proposal

This was a private request. Policy ED-4.5, located in the Economic Development Chapter 9 of the Comprehensive Plan adopted in May 2019, currently states: *Coordinate with the Washington State Department of Transportation (WSDOT). King County, and adjacent cities to plan for access improvements, intersection improvements, and infrastructure maintenance in the SR 169 corridor.*

The policy is supportive of the City’s economic development goals by emphasizing improved accessibility to the key commercial corridor in the City; the policy does fit in the Transportation element of the Comprehensive Plan.

Evaluation Criteria (BDMC 16.10.220)

- A. All Amendments. All of the comprehensive plan amendments shall be reviewed under the following criteria:
1. Whether the proposed amendment(s) conform to the Growth Management Act (Chapter 36.70A RCW);
Moving the amendment to a different chapter would not represent a substantive change in policy. The policy continues to support the GMA goal for coordinated, planned growth, no matter which chapter it is located in.
 2. Whether the proposed amendment(s) are consistent with and implement the city's comprehensive plan, including the goals, policies and implementation strategies of the various elements of the plan;
The policy is consistent with multiple chapters of the comprehensive plan including the economic development, land use, and transportation elements. The proposed amendment to move the policy continues to implement coordination, improvements, and maintenance of SR 169.



3. Whether circumstances related to the proposed amendment(s) and/or the area in which it is located have substantially changed since the adoption of the city's comprehensive plan;
Not applicable. The policy itself is not changing, just the location in the plan.
4. Whether the assumptions upon which the city's comprehensive plan is based are no longer valid, or whether new information is available which was not considered during the adoption process or any annual amendments of the city's comprehensive plan; and
Not applicable. The policy itself is not changing, just the location in the plan.
5. Whether the proposed amendment(s) reflects current, widely held values of the residents of the city.
The wording of the policy will not change with this amendment, reflecting the values held by the residents when this comprehensive plan was implemented and further evaluated as part of the recent 2021 docketing process, which included a public hearing with the Planning Commission. The values are assumed to remain to warrant coordination between jurisdictions to ensure SR 169 continues to be improved and maintained as necessary.

Staff Recommendation

Staff recommends moving Policy ED-4.5 from Chapter 9 (Economic Development) to Chapter 7 (Transportation) as Policy T-26 beneath the *Coordination and Consistency Policies* section.

Next Steps

Following the public hearing staff will revise the recommendation as necessary based on public comments, staff will inform the planning commission of any changes at the following work session for discussion. At the October public hearing of the entire docket, the revised staff recommendation, based on public and planning commission input, will be presented for action.

From: [Kelley Sauskojus](#)
To: [Mona Davis](#)
Subject: RE: Amendments to the 2021 Comprehensive Plan
Date: Friday, February 26, 2021 10:50:42 AM
Attachments: [2021BDCompPlan Suggestions.docx](#)

Dear City of Black Diamond Community Development,

On or before March 1, 2020, numerous people sent in suggested updates to the Black Diamond Comprehensive Plan.

The Black Diamond code says these suggestions are to be part of a preliminary docket report that is considered by the Planning Commission.

Unfortunately, the public's 2020 suggestions were never put forward, and I see no record that the Planning Commission or Council was even aware of them.

Attached is a list of the 2020 Comp Plan update requests compiled from references in public comments to the Planning Commission.

I am sending these as 2021 Comprehensive Plan update suggestions. The people who sent them before may have learned there is no point in doing so. However, these items have merit and would all improve our city and the quality of life for all the residents current and future.

Thank you,
Kelley Sauskojus
Black Diamond resident since 1991

10. Economic Development Chapter:

Remove policy Economic Development ED-4.5, about the Highway 169 corridor, or move policy ED-4.5 to the Transportation Chapter. Policy ED 4.5 is more focused on transportation than Economic Development.

~~Policy ED-4.5: Coordinate with the Washington State Department of Transportation (WSDOT), King County, and adjacent cities to plan for access improvements, intersection improvements, and infrastructure maintenance in the SR 169.~~

11. Land Use Chapter is amended to specify:

Add this text: To ensure planning consistent with Small-Town Character, Black Diamond must carefully ensure existing commercial areas and those planned with the Master Planned Developments (MPDs) can thrive without putting too much pressure on limited infrastructure.

Therefore, removal of policy LU-34 is warranted. Alternately, the word "aggressive " could be removed:

~~Policy LU-34: Create an aggressive economic development strategy, with the cooperation of the City, County, and business and property owners.~~

There are sufficient commercial spaces already developed in Black Diamond or permitted through the MPD's. Therefore, removal of policy LU-42 is also warranted.

~~Policy LU-42: Retain and enhance the existing commercial areas while providing sites large enough to accommodate significant commercial uses.~~



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Meeting Date: August 10, 2021
Staff Report Date: August 3, 2021
To: Planning Commissioners
From: Mona Davis, Community Development Director
Subject: Comprehensive Plan Amendments – SE Connector Alternative

The purpose of this brief is to go over final docket item #2021-02: “Amendments to comprehensive plan Appendix 7 (Transportation) to reflect an alternative SE loop connector route.”

Proposal

This was a private request by Black Diamond Partners LLC, aka Oakpointe, to amend the text and map in the transportation appendix to include an alternative Southeast Loop Connector. The request for the alternative is an addition to the list of future road projects in Appendix 7 and none would be deleted.

Language would be added to include the Southeast Loop Connector Alternative on the list that provides the planned classifications by roadway as follows (in red underline):

Collectors

- Annexation Road*
- Southeast Loop Connector*
- Southeast Loop Connector Alternative*
- Morgan Street
- Baker Street (west of SR 169)
- South Connector*
- Railroad Avenue (Jones Lake Road)
- Lake Sawyer Extension*

Language would also be added to Table 0-9 which lists the Transportation Capacity Adding Projects for 2022-2035 (page 25 of the transportation appendix). See attachments for details. Further, language would be added as follows:

Arterial and Collector Roadway Improvements

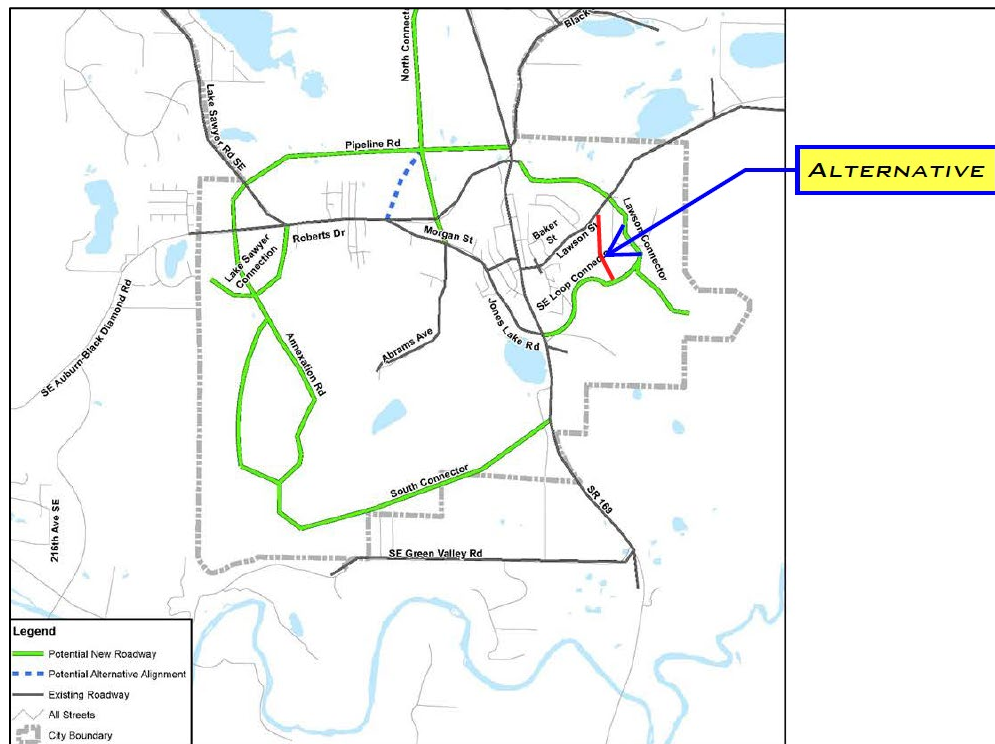
A conceptual configuration for the future roadway system in 2035 is shown in Figure 7-4. New arterial and collector roads include: Pipeline Road, Annexation Road, Lake Sawyer Extension, Lawson Connector, South Connector, Southeast Loop Connector or Southeast Loop Connector Alternative, and North Connector.

...



The Pipeline Road will provide an east / west alternative to Roberts Drive and will enhance the circulation and access for industrial development. The North Connector will provide a north / south alternative to SR 169 in the middle of the City. The Annexation Road would provide north-south and east-west circulation through the southwestern portion of the City's Expansion Area. Other new facilities are proposed to improve general circulation such as the Southeast Loop Connector. The Southeast Loop Connector Alternative is a functionally equivalent roadway alternative to the Southeast Loop Connector, both of which provide secondary access to the Lawson Hills MPD and improve general circulation through the City.

The alternative would be added to the maps in the following location:



Evaluation Criteria (BDMC 16.10.220)

A. All Amendments. All of the comprehensive plan amendments shall be reviewed under the following criteria:

1. Whether the proposed amendment(s) conform to the Growth Management Act (Chapter 36.70A RCW);

The proposal amendment is for an infrastructure improvement that supports development within the urban area of the City of Black Diamond. The GMA encourages development in urban areas where adequate public facilities exist to serve the development. The SE Loop Connector Alternative would meet the goal of providing adequate infrastructure facilities for urban growth.



2. Whether the proposed amendment(s) are consistent with and implement the city's comprehensive plan, including the goals, policies and implementation strategies of the various elements of the plan;

The current Comprehensive Plan identifies the SE Loop Connector as a future transportation improvement. This road is depicted as extending from the Lawson Hills MPD to SR-169. The language in Appendix 7 makes it clear that the routing depicted therein is not settled and that “alternative road alignments may be considered.” The intent behind including a preliminary alignment concept in Appendix 7 was “to show a basic route,” while expressly mentioning that “exact locations will be determined after engineering and environmental review.”

The proposed amendment is consistent with the following comprehensive plan goals and policies:

- **Policy NE-17: Minimize areas of vegetation loss and grading disturbance to protect water quality and prevent erosion, when developing on moderate and highly erodible soils.**
- **Policy NE-35: Preserve existing natural trees and vegetation on steep hillsides, along stream banks and other habitat areas, and where visual buffers between uses or activities are desirable.**
- **Policy T-10 Pedestrians, Bicycles, and Transit Policy: Black Diamond recognizes the primacy of pedestrians and other non-motorized modes of mobility. The City shall lessen dependence upon and the influence of the automobile by encouraging complete streets and multi-modal travel for all users including pedestrians, bicyclists, and transit passengers of all ages and abilities. City actions will:**
 - **Require new roadways to incorporate pedestrian, bicycle and transit facilities including appropriately spaced crosswalks on arterials and collectors.**
- **Policy T-12 Transportation Health and Safety Policy: The City of Black Diamond will provide a transportation system that enhances the health and safety of residents by:**
 - **Expanding the sidewalk, bike lane, and multi-use path network in the city.**
- **Policy T-14 Character of the City Policy: Enhance the character that the City currently possesses by:**
 - **Encouraging landscaping, parkway trees, and compatible architecture in the design and construction of roadways, especially SR 169, and other facilities along selected corridors.**
- **Policy T-15 Environmental Protection and Conservation Policy: Design transportation facilities within Black Diamond that minimizes adverse environmental impacts resulting from both their construction and operation. The City will fulfill this need by:**



- Aligning and locating transportation facilities away from environmentally sensitive areas.
 - Mitigating unavoidable environmental impacts.
 - **Policy ED-4.1: Focus investment in infrastructure and services.**
 - **Policy U-22: Manage the quality of stormwater runoff to protect public health and safety, surface and groundwater quality, and the natural drainage systems.**
 - **Policy U-24: Design stormwater lines or pathways to minimize potential erosion and sedimentation, discourage significant vegetation clearing, and preserve the natural drainage systems such as rivers, streams, lakes, and wetlands.**
3. Whether circumstances related to the proposed amendment(s) and/or the area in which it is located have substantially changed since the adoption of the city's comprehensive plan;
The inclusion of an alternative connection to Lawson Hills can ensure when the MPD project moves forward that there are multiple options that can help the City respond to changing circumstances around transportation and allows the City to evaluate and select the option that best fits the City.
4. Whether the assumptions upon which the city's comprehensive plan is based are no longer valid, or whether new information is available which was not considered during the adoption process or any annual amendments of the city's comprehensive plan; and
Additional investigation and research have been done on the SE Loop Connector since it was originally included in the Comprehensive Plan. Given the additional impacts and hurdles that have been discovered through this research, developing an alternative was a practical approach. The SE Loop Connector Alternative provides an alternate approach that could be utilized if included in the comprehensive plan.
5. Whether the proposed amendment(s) reflects current, widely held values of the residents of the city.
The proposed amendment was added as a docketed item following a public hearing with the Planning Commission and was adopted by City Council as part of the final docket indicating public support for the amendment to be considered. The proposed amendment for an alternative route has fewer environmental impacts, as the route would require less area (number of parcels) of disturbance, reduced topographical impacts to steep slopes (which would result in significantly less cut and fill), and there would be less stormwater facility requirements (i.e., less pollution generating impervious surface).

- B. Amendments for Site-Specific Proposals. In addition to the above, any proposal for a site-specific development or amendment shall be reviewed under the following criteria:



1. Whether the proposed site-specific amendment(s) meets concurrency requirements for transportation and does not adversely affect adopted level of service standards for other public facilities and services (e.g., police, fire and emergency medical services, parks, fire flow and general governmental services);
The proposal would not cause the level of service on the roadways to fall below the City standards. There would be a need for improvements at two intersections to maintain intersection level of service (see item A4 above).
2. Any proposed site-specific amendment(s) will not result in probable significant adverse impacts to the city's transportation network, capital facilities, utilities, parks and environmental features that cannot be mitigated, and will not place uncompensated burdens upon existing or planned service capabilities;
Impacts from the SE Loop Connector Alternative can be fully mitigated, and development of this roadway would be funded by the proponent.
3. In the case of a site-specific amendment(s) to the comprehensive plan's land use map, that the subject parcels are physically suitable for the requested land use designation and the anticipated land use development, including, but not limited to, the following: (i) access; (ii) provision of utilities; and (iii) compatibility with existing and planned surrounding land uses;
The proposed alignment will likely only cross one parcel (1321069018) that is not owned by the proponent, which is suitable for development of the road (the road would cross the undeveloped portion of the parcel).
4. The proposed site-specific amendment(s) will not create pressure to change the land use designation of other properties, unless the change of land use designation for other properties is in the long-term best interests of the city as a whole;
The proposal would not change the land use designation of other properties.
5. The proposed site specific amendment(s) does not materially affect the land use and population growth projections that are the bases of the comprehensive plan;
The proposal itself does not affect land use or population growth projections, but rather would be developed in support of growth at a time when the population of the Lawson Hills MPD would require additional access.
6. If within an incorporated urban growth area (UGA), the proposed site-specific amendment(s) does not materially affect the adequacy or availability of urban facilities and services to the immediate area and the overall UGA;
The proposal would not affect the adequacy of urban facilities or services. Instead, it would provide infrastructure that complements growth in the urban area.



7. The proposed amendment(s) is consistent with any applicable county-wide policies for the city and any other applicable inter-jurisdictional policies or agreements, and any other local, state or federal laws.

The proposal would be consistent with federal, state and local laws, regulations and policies. It would be evaluated in compliance with the development agreement and MPD permit conditions of approval.

Traffic Engineer Review

The transportation memo and documentation provided by the proponent with the application was sent to the City of Black Diamond's third-party, contracted traffic engineer at Parametrix. The materials the applicant submitted were evaluated for accuracy, viability, and to provide a recommendation to the City.

Comments given included confirmation of the trip redistribution in the technical memo, and a desire to see revisions to the traffic memo to identify improvements that would be beyond those, or those not evaluated, in the applicable Environmental Impact Statement. These include the northbound left-turn lane as an additional improvement and the new intersection with Lawson Street forecasted level of service. City staff concurs these revisions need to be included but does not believe these revisions need to occur now, but rather would need to be taken into consideration at the time of the project when the alternatives are evaluated.

After review of the alternative materials, the traffic engineer ultimately concurs with the proposed text and map changes proposed for the comprehensive plan. See attached Technical Review Memo from Alex Atchison, PE with Parametrix dated July 22, 2021.

Staff recommendation

After review of the application materials and third-party review notes provided by the City's contract traffic engineers at Parametrix, staff recommends **approval** of these amendments.

Next Steps

Following the public hearing staff will revise the recommendation as necessary based on public comments, staff will inform the planning commission of any changes at the following work session for discussion. At the October public hearing of the entire docket, the revised staff recommendation based on public and planning commission input will be presented for action.

David Linehan

From: Justin Wortman <jwortman@oakpointe.com>
Sent: Monday, March 1, 2021 3:25 PM
To: Mona Davis
Subject: Black Diamond Comprehensive Plan Amendment -- Items for Docket
Attachments: BD Comprehensive Plan Amendment - SEPA Checklist.pdf; Comp Plan Amendment - SE Loop Connector Alternative.pdf; Master Permit Application_signed.pdf; Sensitive Area ID Form_signed.pdf; Comprehensive Plan Submittal.pdf

Mona,

Please find attached an application proposing an amendment for the docket for the Black Diamond Comprehensive Plan.

If you have any questions or need any additional information, please don't hesitate to ask.

Thanks,
Justin



Justin Wortman
Senior Project Manager



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March 1, 2021

Mona Davis
Community Development Director
City of Black Diamond
Community Development Department
24301 Roberts Drive
P.O. Box 599
Black Diamond, WA 98010

RE: City of Black Diamond Comprehensive Plan Amendment – Items for Docket

Pursuant to Black Diamond Municipal Code 16.10.220, CCD Black Diamond Partners LLC ("Oakpointe" or "Master Developer") respectively suggests text and map amendments to the City of Black Diamond Comprehensive Plan to include an alternative Southeast Loop Connector. The rationale for this request is to include a Southeast Loop Connector alternative in order to provide optionality given potential environmental impacts, topography and extensive third-party parcel acquisition associated with the existing Southeast Loop Connector.

Attached to this letter is Oakpointe's submittal to meet the City's requirements for a comprehensive plan text and map amendment. It includes a project narrative, the purpose of the amendments, consistency with the comprehensive plan goals and policies, and consistency with the evaluation criteria for amendments. It also includes suggested text changes (in "bill" format) for three pages of the comprehensive plan, as well as one map change. A SEPA non-project action checklist is attached as well.

I appreciate your consideration of our suggested changes to the Black Diamond Comprehensive Plan.

Sincerely,

Brian Ross
CEO Oakpointe



PROJECT NARRATIVE

The proposal is a Comprehensive Plan amendment that would allow an alternative route alignment to the SE Loop Connector and is identified as a future transportation improvement in the 2019 adopted Comprehensive Plan. As an alternative to the SE Loop Connector extending from the Lawson Hills MPD to SR 169, the SE Loop Connector Alternative would route the access road from the MPD to Lawson Street (see proposed map change). This request is an addition to the list of future road projects in Appendix 7, Table 0-9 (nothing is being deleted).

One parcel would be affected by this proposal: King County Parcel Number 1321069018. The address is 32317 Botts Drive. The owner is Palmer Coking Coal Co. LLP (contact information: P.O. Box 10, Black Diamond, Washington 98010). The parcel is 689,990 square feet in size. The existing land use zone is R4 - no concurrent zoning change is being requested. The legal description is:

PARCEL 4 CITY OF BLACK DIAMOND LOT LINE ADJUSTMENT NO PLN 19-0028
RECORDING NO 20190619900008 (BEING A PORTION OF NW QTR STR 13-21-06 AND NE QTR STR 14-21-06).

The proposal is for text and map amendments. The suggested changes to the Comprehensive Plan are in Appendix 7 (Transportation Appendix) for the plan sections titled Functional Classification System located on page A7-10; Transportation Improvement Recommendations on page 19 (*should be A7-19*); and Table 0-9 on page 25 (*should be A7-25*). A map amendment is suggested for Figure 7-4 on page 47 (*should be A7-47*). Attached are the relevant Comprehensive Plan text sections and figure with the suggested additions in “bill” format. Similarly, the suggested map change is shown in red.

PURPOSE OF THE AMENDMENT

The amendment is proposed because the alternative alignment likely involves fewer impacts, less cost, and reduced right-of-way acquisition requirements. It does not preclude development of the existing SE Loop Connector, but provides two options for a secondary access route to the Lawson Hills MPD. As stated in the Transportation Appendix on page A7-19 of the Transportation (emphasis added):

*“The proposed roadways are to show the general route and connections of future roadways and are not specific to design level locations. **Alternative roads and alignments may be considered.** The intent is to show a basic route, connections and concept and the exact locations will be determined after engineering and environmental review. These new roads will distribute future traffic growth throughout the City that would otherwise have been concentrated on the few existing major arterials.”*

This proposal presents an alternative road alignment to be considered that will further the objective stated above. Some preliminary environmental and engineering work has been completed for this alternative, but in the future (when the road is needed) a decision can be made on the which option to construct.

CONSISTENCY WITH THE COMPREHENSIVE PLAN

Comprehensive Plan Goals and Policies

Natural Environment Policy 17: Minimize areas of vegetation loss and grading disturbance to protect water quality and prevent erosion, when developing on moderate and highly erodible soils.

The SE Loop Connector Alternative would cross a relatively flat area and the alignment is not mapped as a landslide or erosion hazard area. Construction Best Management Practices to avoid or minimize erosion would be employed as part of the Temporary Erosion and Sediment Control Plan. This alternative results in minimal vegetation loss and grading (refer to the SEPA checklist).

Natural Environment Policy 35: Preserve existing natural trees and vegetation on steep hillsides, along stream banks and other habitat areas, and where visual buffers between uses or activities are desirable.

The SE Loop Connector Alternative avoids crossing steep hillsides thereby helping to preserve existing natural trees and vegetation on steep slopes.

Transportation Policy T-10 Pedestrians, Bicycles, and Transit Policy: Black Diamond recognizes the primacy of pedestrians and other non-motorized modes of mobility. The City shall lessen dependence upon and the influence of the automobile by encouraging complete streets and multi-modal travel for all users including pedestrians, bicyclists, and transit passengers of all ages and abilities. City actions will:

- **Require new roadways to incorporate pedestrian, bicycle and transit facilities including appropriately spaced crosswalks on arterials and collectors.**

The SE Loop Connector Alternative would incorporate pedestrian and bicycle facilities into the road design.

Transportation Policy T-12 Transportation Health and Safety Policy: The City of Black Diamond will provide a transportation system that enhances the health and safety of residents by:

- **Expanding the sidewalk, bike lane, and multi-use path network in the city.**

The SE Loop Connector Alternative would expand the sidewalk and bike lane network in the City.

Transportation Policy T-14 Character of the City Policy: Enhance the character that the City currently possesses by:

- **Encouraging landscaping, parkway trees, and compatible architecture in the design and construction of roadways, especially SR 169, and other facilities along selected corridors.**

The SE Loop Connector Alternative would incorporate landscaping into the design of the roadway.

Transportation Policy T-15 Environmental Protection and Conservation Policy: Design transportation facilities within Black Diamond that minimizes adverse environmental impacts resulting from both their construction and operation. The City will fulfill this need by:

- **Aligning and locating transportation facilities away from environmentally sensitive areas**

The SE Loop Connector Alternative would locate the right-of-way away from wetlands and steep slopes. The SE Loop Connector Alternative would cross Lawson Creek but would provide an opportunity for the elimination of the existing culvert under Botts Drive. This would be part of future studies concerning the implementation of the alternative.

- **Mitigating unavoidable environmental impacts**

Under the SE Loop Connector Alternative there would be few environmental impacts due to the routing of the alignment. However, this alternative would cross Lawson Creek. A bridge crossing is proposed so that stream flow and fish passage are not impeded. Other mitigation as necessary would be incorporated into the design for any impacts that may occur in consultation with the City. This may include the elimination of the Botts Drive crossing of Lawson Creek and the removal of the existing culvert.

Economic Development Policy ED-4.1: Focus investment in infrastructure and services

Stormwater Policy U-22: Manage the quality of stormwater runoff to protect public health and safety, surface and groundwater quality, and the natural drainage systems.

The SE Loop Connector Alternative would provide stormwater runoff flow control and water quality treatment prior to discharge of runoff.

Stormwater Policy U-24: Design stormwater lines or pathways to minimize potential erosion and sedimentation, discourage significant vegetation clearing, and preserve the natural drainage systems such as rivers, streams, lakes, and wetlands.

The SE Loop Connector Alternative would provide stormwater flow control and water quality treatment. Outfall of treated stormwater runoff would be discharged to existing drainage systems in a manner consistent with the Department of Ecology's Stormwater Manual for Western Washington.

EVALUATION CRITERIA FOR PROPOSED AMENDMENTS (BDMC Chapter 16.10.220)

BDMC 16.10.220.A. All Amendments. All of the comprehensive plan amendments shall be reviewed under the following criteria:

- 1. Whether the proposed amendment(s) conform to the Growth Management Act (Chapter 36.70A RCW).**

The proposal amendment is for an infrastructure improvement that supports development within the urban area of the City of Black Diamond. The GMA encourages development in urban areas where adequate public facilities exist to serve the development. The SE Loop

Connector Alternative would meet the goal of providing adequate infrastructure facilities for urban growth.

2. Whether the proposed amendment(s) are consistent with and implement the city's comprehensive plan, including the goals, policies, and implementation strategies of the various elements of the plan.

Consistency with the City's Comprehensive Plan is described above.

3. Whether circumstances related to the proposed amendment(s) and/or the area in which it is located have substantially changed since the adoption of the city's comprehensive plan.

4. Whether the assumptions upon which the city's comprehensive plan is based are no longer valid, or whether new information is available which was not considered during the adoption process or any annual amendments of the city's comprehensive plan.

Significant additional investigation and research has been done on the SE Loop Connector since it was originally included in the Comprehensive Plan. Given the considerable additional impacts and hurdles that have been discovered through this research, it became apparent that developing an alternative was a practical approach. The SE Loop Connector Alternative provides a more practical approach.

5. Whether the proposed amendment(s) reflects current, widely held values of the residents of the city.

The proposed amendment would likely be accepted by residents as a better alternative to the SE Loop Connector currently in the Comprehensive Plan. This would be due to fewer environmental impacts:

- The route does not bring traffic through an existing quiet neighborhood.
- Route does not cross as steep of slopes and significantly less cut and fill
- Less area of disturbance
- Does not require large retaining walls
- Acquisition of one parcel instead of 16 parcels
- Reduction in stormwater facility requirements (i.e., less pollution generating impervious surface)

B. Amendments for Site-Specific Proposals. In addition to the above, any proposal for a site-specific development or amendment shall be reviewed under the following criteria:

1. Whether the proposed site-specific amendment(s) meets concurrency requirements for transportation and does not adversely affect adopted level of service standards for other public facilities and services (e.g., police, fire and emergency medical services, parks, fire flow and general governmental services).

The proposal would not cause the level of service on the roadways to fall below the City standards. There would be a need for improvements at two intersections to maintain intersection level of service (see item A4 above).

2. Any proposed site-specific amendment(s) will not result in probable significant adverse impacts to the city's transportation network, capital facilities, utilities, parks and

environmental features that cannot be mitigated, and will not place uncompensated burdens upon existing or planned service capabilities.

Impacts from the SE Loop Connector Alternative can be fully mitigated, and development of this roadway would be funded by the proponent.

3. In the case of a site-specific amendment(s) to the comprehensive plan's land use map, that the subject parcels are physically suitable for the requested land use designation and the anticipated land use development, including, but not limited to, the following: (i) access; (ii) provision of utilities; and (iii) compatibility with existing and planned surrounding land uses.

The alignment would cross one parcel, which is suitable for development of the road (the road would cross the undeveloped portion of the parcel).

4. The proposed site-specific amendment(s) will not create pressure to change the land use designation of other properties, unless the change of land use designation for other properties is in the long-term best interests of the city as a whole.

The proposal would not change the land use designation of other properties.

5. The proposed site specific amendment(s) does not materially affect the land use and population growth projections that are the bases of the comprehensive plan.

The proposal itself does not affect land use or population growth but rather would be developed in support of growth at a time when the population of the Lawson Hills MPD would require additional access.

6. If within an incorporated urban growth area (UGA), the proposed site-specific amendment(s) does not materially affect the adequacy or availability of urban facilities and services to the immediate area and the overall UGA.

The proposal would not affect the adequacy of urban facilities or services. Instead, it would provide infrastructure that complements growth in the urban area.

7. The proposed amendment(s) is consistent with any applicable county-wide policies for the city and any other applicable inter-jurisdictional policies or agreements, and any other local, state or federal laws.

The proposal would be consistent with federal, state and local laws, regulations and policies. It would occur in compliance with a development agreement and MPD permit conditions of approval.

Suggested Comprehensive Plan Changes

Functional Classification System

Roadway classifications define the character of service that a street is intended to provide. The City has classified its roadway system and adopted roadway design standards based on the roadway's functional and physical characteristics. The functional classification system is a hierarchical system providing for the gradation of traffic flow from an access function to a movement function. The functional classification system for the City is described in **Table 0-4** and the accompanying roadway design standards are summarized in **Table 0-5**.

The following list provides the planned classifications by roadway.

Principal Arterials

- SR 169

Minor Arterials

- SE 288th Street
- Roberts Drive
- North Connector*
- North-South Connector*/Abrams Road
- Black Diamond-Ravensdale Road
- Lake Sawyer Road
- Pipeline Road*
- Lawson Connector*

Collectors

- Annexation Road*
- Southeast Loop Connector*
- [Southeast Loop Connector Alternative*](#)
- Morgan Street
- Baker Street (west of SR 169)
- South Connector*
- Railroad Avenue (Jones Lake Road)
- Lake Sawyer Extension* a

Local Access

All remaining roadways within the city are shown on Figure 7-1 and Table 0-4. These tables serve as only a general guide for the different classifications and the City's Road Design Standards should be reference for further clarification.

The short-term forecast coincides with the City's TIP and represents current growth trends and expected short term development within the city. Future levels and timing of land development were based on conversations with City staff, local landowners, and development firms. Changes to development patterns and priorities may vary the need for and the completion order of the transportation improvements. The long-term traffic forecast represents the future growth in housing, employment and background traffic that will produce the expected 2035 traffic projections. The City's Development Agreement with the Master Planned Development (MPD) Developer requires updates at the beginning and middles of the three phases of development so as to program the timing of transportation capacity adding projects to come online as needed.

Transportation Improvement Recommendations

This section of the transportation plan establishes intersection and roadway improvement programs for the periods 2015 to 2021 and 2022 to 2035.

Arterial and Collector Roadway Improvements

A conceptual configuration for the future roadway system in 2035 is shown in Figure 7-4. New arterial and collector roads include: Pipeline Road, Annexation Road, Lake Sawyer Extension, Lawson Connector, South Connector, Southeast Loop Connector or Southeast Loop Connector Alternative, and North Connector.

The proposed roadways are to show the general route and connections of future roadways and are not specific to design level locations. Alternative roads and alignments may be considered. The intent is to show a basic route, connections and concept and the exact locations will be determined after engineering and environmental review. These new roads will distribute future traffic growth throughout the City that would otherwise have been concentrated on the few existing major arterials.

The Pipeline Road will provide an east / west alternative to Roberts Drive and will enhance the circulation and access for industrial development. The North Connector will provide a north / south alternative to SR 169 in the middle of the City. The Annexation Road would provide north-south and east-west circulation through the southwestern portion of the City's Expansion Area. Other new facilities are proposed to improve general circulation such as the Southeast Loop Connector. The Southeast Loop Connector Alternative is a functionally equivalent roadway alternative to the Southeast Loop Connector, both of which provide secondary access to the Lawson Hills MPD and improve general circulation through the City.

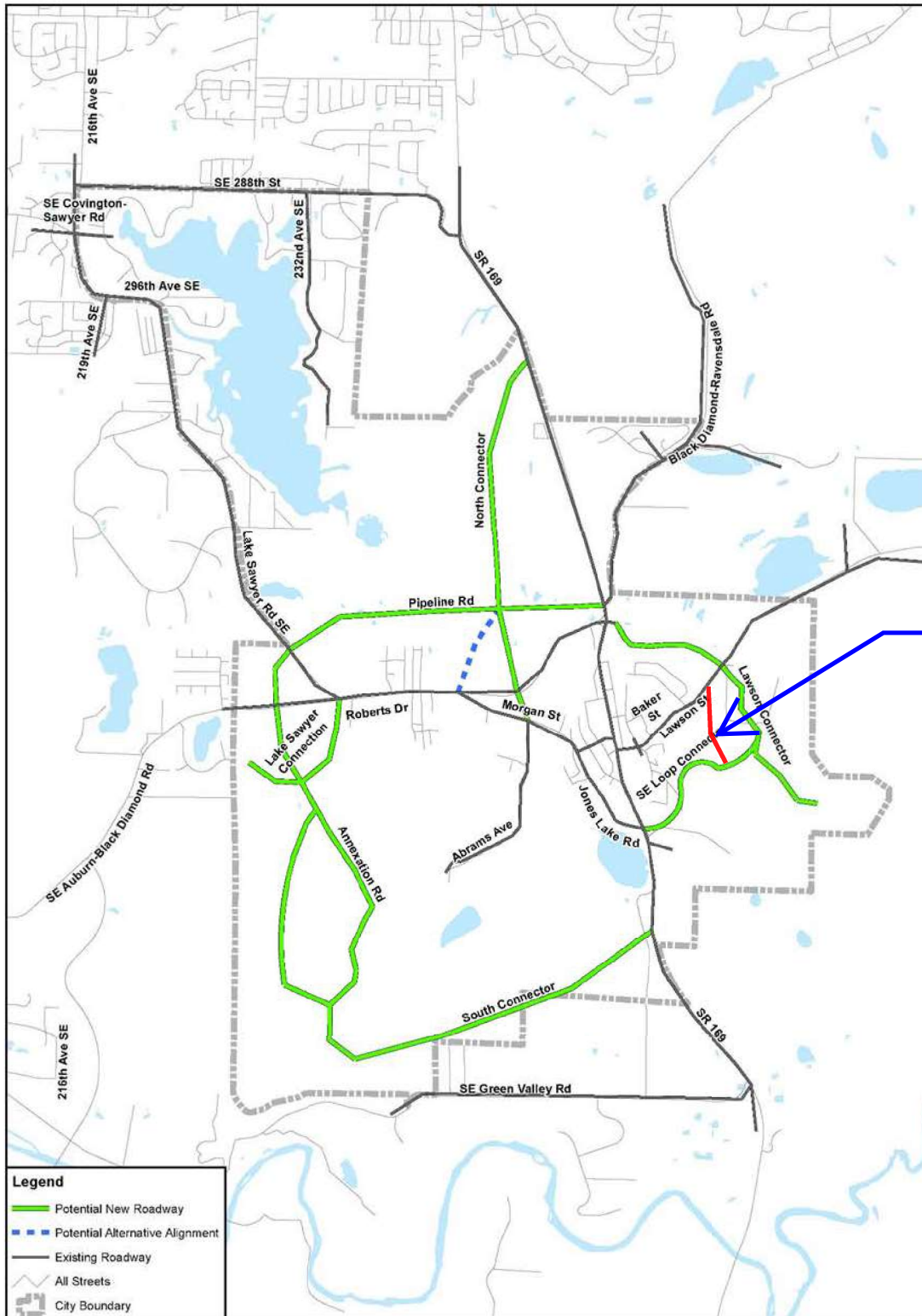
Agency Coordination

Improvements on SR 169 will require coordination with WSDOT. The City has adopted a Gateway Overlay District from the North City boundary to Roberts Drive regulating how development will occur along the roadway including separated meandering sidewalks within the front setbacks of the properties. The Comprehensive Plan should include a vision for SR 169 through the city. The City could use the vision to begin discussions with WSDOT to coordinate the future design of the road. Then as development occurs along the highway, improvements (such as lanes, sidewalks, bike lanes, median planting, turn pockets, driveways, and signals) could be implemented consistent with the overall design. The City will continue to participate in the implementation of or future updates to the SR 169 Route Development Plan (WSDOT, 2007) and as well as any other regional transportation planning efforts.

CITY OF BLACK DIAMOND COMPREHENSIVE PLAN

May 2, 2019

A8, South Connector	South Connector	A new east west collector in south Black Diamond connecting SR 169 to southwest Black Diamond	Within 7 to 20 years	\$7,560,000 with City
A9, SE Loop connector	SE Loop Connector	Construct a new collector street from Lawson Hills MPD to SR 169 for a second connection	Within 7 to 20 years	\$7,125,000 with City
<u>SE Loop Connector Alternative</u>	<u>SE Loop Connector Alternative</u>	<u>Construct a new collector street from Lawson Hills MPD to Lawson Street for a second connection</u>	<u>Within 7 to 20 years</u>	<u>Future grant funding</u>
Widen SR 169 From Roberts Drive to north City limits		Widen SR 169 to 4 lanes from Roberts Drive to north City limits.	Within 7 to 20 years	Future grant funding
SR 169 / RR Ave / SE Loop Connector	SR 169 / Jones Lake Road / SE Loop Connector	Signal or roundabout	Within 7 to 20 years	\$630,000 City and
<u>Lawson Street/SE Loop Connector Alternative</u>	<u>Lawson Street/SE Loop Connector Alternative</u>	<u>Lawson Street & SE Loop Connector Alternative Intersection</u>	<u>Within 7 to 20 years</u>	<u>Future grant funding</u>
SE 288 th Street & 232 nd Ave SE		Channelization improvements	Within 7 to 20 years	Future grant funding
SR 169 / South Connector		Roundabout	Within 7 to 20 years	\$630,000 City and
North Connector & Pipeline Road		Roundabout	Within 7 to 20 years	Future with City
North Connector & Roberts Drive		Roundabout or maybe a signal	Within 7 to 20 years	Future with City
SR 169 / Baker Street & SR 169/ Lawson Street	Intersection improvements for Lawson Street and Baker Street with SR 169.	One roundabout or two signals. Right of Way needed.	Within 7 to 20 years	\$1,260,000
SE Auburn Black Diamond Road / Morgan Street	Roberts Drive & Morgan Street Intersection	Roundabout or maybe a Signal	Within 7 to 20 years	
SE 288 th Street & 232 nd Ave SE		Channelization Improvements.	Within 7 to 20 years	\$630,000
North Connector & Pipeline Road		Roundabout	Within 7 to 20 years	



ALTERNATIVE

Additional Reference Material

MEMORANDUM

Date:	March 1, 2021	TG:	16450.00
To:	Andrew Williamson – City of Black Diamond		
From:	Mike Swenson, P.E., PTOE and Maris Fry, P.E. – Transpo Group		
cc:	Brian Ross and Justin Wortman – Oakpointe		
Subject:	Comprehensive Plan Amendment – SE Loop Connector Alternative		

This memorandum provides analysis evaluating the proposed inclusion of the SE Loop Connector Alternative in the City of Black Diamond's 2019 Comprehensive Plan. This memorandum includes the following information:

- Overview of the proposed Alternative
- Summary of pertinent EIS findings
- Operational impacts of the SE Loop Connector Alternative

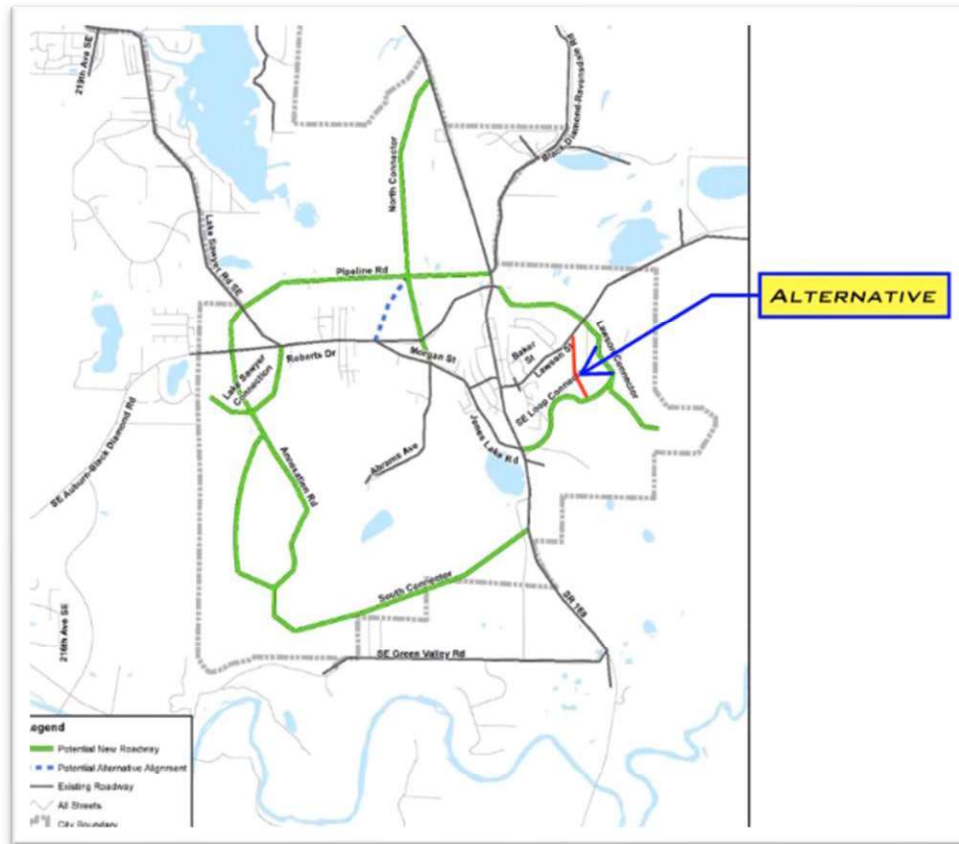
As detailed below, this analysis determined that the worst-case impacts of the proposed SE Loop Connector Alternative could be sufficiently mitigated through the addition of turn lanes at the intersections of SR 169/Baker Street and SR 169/Lawson Street.

Alternative Overview

As shown in Figure 1, the Comprehensive Plan currently identifies the SE Loop Connector as a connection between the Lawson Connector and SR 169. The identified SE Loop Connector Alternative is shown in Figure 1.

The SE Loop Connector was analyzed in the *Lawson Hills Technical Transportation Report (TTR)*, performed by Parametrix in 2009, which was used as the basis for the transportation-related EIS findings for the Lawson Hills MPD. To understand the worst-case impacts of the proposed SE Loop Connector Alternative, the volume projections outlined in the Lawson Hills TTR were updated assuming all traffic shifts from the SE Loop Connector to the Alternative. Based on the anticipated trip assignment and re-routing associated with the Alternative, volume and operations impacts were limited to the following intersections:

1. SR 169/Baker Street
2. SR 169/Lawson Street
3. SR 169/Jones Lake Road
4. Railroad Avenue/Baker Street



Summary of Pertinent EIS Findings

The analysis contained within the Lawson Hills TTR developed traffic volume projections and defined impacts for the Lawson Hills MPD, as well as the collective impacts of the Lawson Hills and Ten Trails MPDs. Based on this analysis, the following mitigations were identified at the above study intersections for full build-out conditions of both MPDs. The channelization and traffic control for the intersections are also summarized in Figure 1.

- **SR 169/Baker Street:** Traffic signal and northbound left-turn lane
- **SR 169/Lawson Street:** Traffic signal and southbound left-turn lane
- **SR 169/Jones Lake Road:** Traffic signal and northbound, westbound, and southbound left-turn lanes
- **Railroad Avenue/Baker Street:** No mitigations necessary

Traffic Operations Analysis

To determine the worst-case impacts of the SE Loop Connector Alternative, traffic volume projections from the Lawson Hills TTR were revised to account for re-routed traffic. This analysis conservatively assumed that all traffic routed through the SE Loop Connector in the EIS is re-routed to Lawson Street. Figure 1 depicts the re-routed volumes and the adjusted full-build traffic volumes.

Using these adjusted volumes, intersection level of service (LOS) was evaluated at the study intersections. The channelization and traffic control associated with the EIS-identified mitigations were used as a baseline in order to determine if additional mitigations would be necessary. For the intersection of SR 169/Jones Lake Road, channelization and traffic control consistent with existing conditions was assumed to determine if introduction of the SE Loop Connector Alternative would result in mitigations no longer being necessary.

Weekday PM peak hour levels of service and delays were calculated at study intersections based on existing peak hour factors (PHFs) and methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board). As shown in Table 1, the re-routed traffic volumes result in the need for additional improvements beyond those identified in the EIS at two intersections: SR 169/Baker Street and SR 169/Lawson Street. Additionally, mitigations are still required at the intersection of SR 169/Jones Lake Road.

In order to meet WSDOT's LOS D or better standard, additional southbound and eastbound right-turn lanes would be needed at SR 169/Baker Street and an additional westbound right-turn lane would be needed at SR 169/Lawson Street. Additionally, the traffic signal and northbound left-turn lane would need to remain at the intersection of SR 169/Jones Lake Road. Consistent with the EIS, no mitigations would be necessary at the intersection of Railroad Avenue/Baker Street. The mitigated channelization and traffic control assumptions are summarized in Figure 1. With these additional mitigations in place, the intersections are projected to operate at LOS D or better, as shown on Table 1.

Table 1. Traffic Analysis Summary – Removal of SE Loop Connector

Intersection	LOS Standard	Mitigated Traffic Control (EIS)			Mitigated Traffic Control (Removal of SE Loop Connector)		
		LOS ¹	Delay ²	WM ³	LOS	Delay	WM
1. SR 169/Baker Street	D	F	129	-	D	53	-
2. SR 169/Lawson Street	D	F	170	-	D	48	-
3. SR 169/Jones Lake Road	D	F	53	EB	A	4	-
4. Railroad Avenue/Baker Street	C	B	12	WB	No Change		

Source: HCM 6th Edition and Transpo Group, 2020

1. Level of service (A – F) as defined by the Highway Capacity Manual (HCM) 6th Edition, Transportation Research Board

2. Average delay per vehicle in seconds

3. Worst movement (WM) reported for two-way stop sign traffic control

Conclusions

This analysis determined that the worst-case impacts of the SE Loop Connector Alternative can be adequately mitigated assuming the following:

- Implementation of additional improvements beyond those identified in the EIS at two intersections:
 - **SR 169/Baker Street:** New southbound and eastbound right-turn lanes
 - **SR 169/Lawson Street:** New westbound right-turn lane
- Implementation of limited improvements (construction of a traffic signal and northbound left-turn lane) at the intersection of **SR 169/Jones Lake Road**

Additionally, improvements would remain unnecessary at the intersection of Railroad Avenue/Baker Street.



	Weekday PM Peak Hour Traffic Volumes		Change
	Re-Routed	With SE Loop Connector Alternative	
1 SR 169/ Baker St			
2 SR 169/ Lawson St			
3 SR 169/ Jones Lake Rd			 Signal was proposed at intersection
4 Railroad Ave/ Baker St			No change relative to existing

Traffic Analysis in Support of SE Loop Connector Alternative

Comprehensive Plan Amendment

Attachment A:
LOS Worksheets

HCM 6th Signalized Intersection Summary

1: SR-169 & Baker St

02/26/2021

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	288	252	802	1392	104
Future Volume (veh/h)	60	288	252	802	1392	104
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	297	260	827	1435	107
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	38	182	218	1502	1166	87
Arrive On Green	0.14	0.14	0.19	1.00	0.68	0.68
Sat Flow, veh/h	270	1291	1781	1870	1719	128
Grp Volume(v), veh/h	360	0	260	827	0	1542
Grp Sat Flow(s),veh/h/ln	1565	0	1781	1870	0	1847
Q Serve(g_s), s	22.5	0.0	15.5	0.0	0.0	108.5
Cycle Q Clear(g_c), s	22.5	0.0	15.5	0.0	0.0	108.5
Prop In Lane	0.17	0.82	1.00			0.07
Lane Grp Cap(c), veh/h	220	0	218	1502	0	1253
V/C Ratio(X)	1.64	0.00	1.20	0.55	0.00	1.23
Avail Cap(c_a), veh/h	220	0	218	1502	0	1253
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.13	0.13	0.00	1.00
Uniform Delay (d), s/veh	68.8	0.0	55.9	0.0	0.0	25.8
Incr Delay (d2), s/veh	305.7	0.0	93.9	0.2	0.0	111.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.7	0.0	13.3	0.1	0.0	83.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	374.5	0.0	149.8	0.2	0.0	136.8
LnGrp LOS	F	A	F	A	A	F
Approach Vol, veh/h	360			1087	1542	
Approach Delay, s/veh	374.5			36.0	136.8	
Approach LOS	F			D	F	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	133.0		27.0		20.0	113.0
Change Period (Y+Rc), s	4.5		4.5		4.5	4.5
Max Green Setting (Gmax), s	128.5		22.5		15.5	108.5
Max Q Clear Time (g_c+I1), s	2.0		24.5		17.5	110.5
Green Ext Time (p_c), s	8.1		0.0		0.0	0.0
Intersection Summary						
HCM 6th Ctrl Delay			128.8			
HCM 6th LOS			F			

HCM 6th Signalized Intersection Summary

2: SSR-169/SR-169 & Lawson St

02/26/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↗	↘	
Traffic Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Future Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1811	1811	1811	1870	1870	1870
Adj Flow Rate, veh/h	1	1	1	179	0	395	1	682	173	532	1190	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	2	2	2
Cap, veh/h	71	70	56	90	0	132	23	698	177	518	1526	6
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.50	0.50	0.50	0.58	1.00	1.00
Sat Flow, veh/h	332	569	450	485	0	1071	0	1393	353	1781	1861	8
Grp Volume(v), veh/h	3	0	0	574	0	0	856	0	0	532	0	1195
Grp Sat Flow(s), veh/h/ln	1351	0	0	1556	0	0	1747	0	0	1781	0	1869
Q Serve(g_s), s	0.0	0.0	0.0	19.6	0.0	0.0	7.6	0.0	0.0	46.5	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	19.8	0.0	0.0	76.7	0.0	0.0	46.5	0.0	0.0
Prop In Lane	0.33		0.33	0.31		0.69	0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	197	0	0	222	0	0	898	0	0	518	0	1533
V/C Ratio(X)	0.02	0.00	0.00	2.59	0.00	0.00	0.95	0.00	0.00	1.03	0.00	0.78
Avail Cap(c_a), veh/h	197	0	0	222	0	0	898	0	0	518	0	1533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.09
Uniform Delay (d), s/veh	61.5	0.0	0.0	71.4	0.0	0.0	39.0	0.0	0.0	33.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	726.3	0.0	0.0	20.6	0.0	0.0	19.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	54.0	0.0	0.0	37.5	0.0	0.0	18.7	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	0.0	0.0	797.7	0.0	0.0	59.6	0.0	0.0	53.3	0.0	0.4
LnGrp LOS	E	A	A	F	A	A	E	A	A	F	A	A
Approach Vol, veh/h		3			574			856			1727	
Approach Delay, s/veh		61.6			797.7			59.6			16.7	
Approach LOS		E			F			E			B	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	51.0	84.7		24.3		135.7		24.3				
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s	46.5	80.2		19.8		131.2		19.8				
Max Q Clear Time (g_c+H), s	19.5	78.7		2.2		2.0		21.8				
Green Ext Time (p_c), s	0.0	0.9		0.0		19.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				170.2								
HCM 6th LOS				F								

HCM 6th TWSC

3: SR-169 & Railroad Ave

02/26/2021

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	108	38	837	1323	1
Future Vol, veh/h	0	108	38	837	1323	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	111	39	863	1364	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2306	1365	1365	0	-	0
Stage 1	1365	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	42	180	503	-	-	-
Stage 1	237	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	36	180	503	-	-	-
Mov Cap-2 Maneuver	36	-	-	-	-	-
Stage 1	202	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	52.9	0.6		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	503	-	180	-	-	
HCM Lane V/C Ratio	0.078	-	0.619	-	-	
HCM Control Delay (s)	12.8	0	52.9	-	-	
HCM Lane LOS	B	A	F	-	-	
HCM 95th %tile Q(veh)	0.3	-	3.5	-	-	

HCM 6th TWSC

4: Railroad Ave/Morgan St & Baker St

02/26/2021

Intersection						
Int Delay, s/veh	7.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	359	44	16	329	132
Future Vol, veh/h	13	359	44	16	329	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	370	45	16	339	136
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	867	53	0	0	61	0
Stage 1	53	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	323	1014	-	-	1542	-
Stage 1	970	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	246	1014	-	-	1542	-
Mov Cap-2 Maneuver	246	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.8	0		5.7		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	914	1542	-	
HCM Lane V/C Ratio	-	-	0.42	0.22	-	
HCM Control Delay (s)	-	-	11.8	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	2.1	0.8	-	

HCM 6th Signalized Intersection Summary

1: SR-169 & Baker St

02/26/2021

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	288	252	802	1392	104
Future Volume (veh/h)	60	288	252	802	1392	104
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	297	260	827	1435	107
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	2	2	2	2
Cap, veh/h	102	321	313	1655	1321	1119
Arrive On Green	0.06	0.06	0.20	1.00	0.71	0.71
Sat Flow, veh/h	1725	1535	1781	1870	1870	1585
Grp Volume(v), veh/h	62	297	260	827	1435	107
Grp Sat Flow(s),veh/h/ln	1725	1535	1781	1870	1870	1585
Q Serve(g_s), s	5.6	6.3	18.2	0.0	113.0	3.4
Cycle Q Clear(g_c), s	5.6	6.3	18.2	0.0	113.0	3.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	102	321	313	1655	1321	1119
V/C Ratio(X)	0.61	0.92	0.83	0.50	1.09	0.10
Avail Cap(c_a), veh/h	194	403	313	1655	1321	1119
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.46	0.46	1.00	1.00
Uniform Delay (d), s/veh	73.5	62.0	60.1	0.0	23.5	7.4
Incr Delay (d2), s/veh	5.7	23.7	8.6	0.5	51.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	17.5	10.5	0.2	64.7	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	79.2	85.7	68.7	0.5	75.2	7.6
LnGrp LOS	E	F	E	A	F	A
Approach Vol, veh/h	359			1087	1542	
Approach Delay, s/veh	84.6			16.8	70.5	
Approach LOS	F			B	E	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	146.2		13.8		28.7	117.5
Change Period (Y+Rc), s	4.5		4.5		4.5	4.5
Max Green Setting (Gmax), s	133.0		18.0		15.5	113.0
Max Q Clear Time (g_c+I1), s	2.0		8.3		20.2	115.0
Green Ext Time (p_c), s	8.1		0.9		0.0	0.0
Intersection Summary						
HCM 6th Ctrl Delay			52.7			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary

2: SSR-169/SR-169 & Lawson St

02/26/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔		↔	↔	
Traffic Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Future Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1811	1811	1811	1870	1870	1870
Adj Flow Rate, veh/h	1	1	1	179	0	395	1	682	173	532	1190	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	2	2	2
Cap, veh/h	30	29	15	133	0	667	23	698	177	518	1526	6
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.50	0.50	0.50	0.39	1.00	1.00
Sat Flow, veh/h	0	237	119	710	0	1610	0	1393	353	1781	1861	8
Grp Volume(v), veh/h	3	0	0	179	0	395	856	0	0	532	0	1195
Grp Sat Flow(s), veh/h/ln	356	0	0	710	0	1610	1747	0	0	1781	0	1869
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	19.8	7.6	0.0	0.0	46.5	0.0	0.0
Cycle Q Clear(g_c), s	19.8	0.0	0.0	19.8	0.0	19.8	76.7	0.0	0.0	46.5	0.0	0.0
Prop In Lane	0.33		0.33	1.00		1.00	0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	74	0	0	133	0	667	898	0	0	518	0	1533
V/C Ratio(X)	0.04	0.00	0.00	1.35	0.00	0.59	0.95	0.00	0.00	1.03	0.00	0.78
Avail Cap(c_a), veh/h	74	0	0	133	0	667	898	0	0	518	0	1533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.12	0.00	0.12
Uniform Delay (d), s/veh	62.3	0.0	0.0	73.5	0.0	36.4	39.0	0.0	0.0	49.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	198.0	0.0	1.4	20.6	0.0	0.0	21.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	12.8	0.0	12.4	37.5	0.0	0.0	22.8	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	0.0	0.0	271.4	0.0	37.8	59.6	0.0	0.0	70.5	0.0	0.5
LnGrp LOS	E	A	A	F	A	D	E	A	A	F	A	A
Approach Vol, veh/h		3			574			856			1727	
Approach Delay, s/veh		62.5			110.6			59.6			22.1	
Approach LOS		E			F			E			C	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	51.0	84.7		24.3		135.7		24.3				
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s	46.5	80.2		19.8		131.2		19.8				
Max Q Clear Time (g_c+1.0), s	19.8	78.7		21.8		2.0		21.8				
Green Ext Time (p_c), s	0.0	0.9		0.0		19.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				48.4								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

3: SR-169 & Railroad Ave

02/26/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Volume (veh/h)	1	108	38	837	1323	1
Future Volume (veh/h)	1	108	38	837	1323	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	39	863	1364	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	2		334	1697	1696	1
Arrive On Green	0.00	0.00	0.91	0.91	0.91	0.91
Sat Flow, veh/h	912	0	398	1870	1869	1
Grp Volume(v), veh/h	2	0	39	863	0	1365
Grp Sat Flow(s), veh/h/ln	1825	0	398	1870	0	1870
Q Serve(g_s), s	0.1	0.0	3.7	7.9	0.0	25.1
Cycle Q Clear(g_c), s	0.1	0.0	28.8	7.9	0.0	25.1
Prop In Lane	0.50	0.00	1.00			0.00
Lane Grp Cap(c), veh/h	5		334	1697	0	1697
V/C Ratio(X)	0.41		0.12	0.51	0.00	0.80
Avail Cap(c_a), veh/h	328		334	1697	0	1697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.8	0.0	6.5	0.8	0.0	1.6
Incr Delay (d2), s/veh	45.9	0.0	0.7	1.1	0.0	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.1	0.0	0.4	0.5	0.0	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	95.7	0.0	7.2	1.9	0.0	5.8
LnGrp LOS	F		A	A	A	A
Approach Vol, veh/h	2	A		902	1365	
Approach Delay, s/veh	95.7			2.1	5.8	
Approach LOS	F			A	A	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	95.2			4.8		95.2
Change Period (Y+Rc), s	4.5			4.5		4.5
Max Green Setting (Gmax), s	73.0			18.0		73.0
Max Q Clear Time (g_c+I1), s	30.8			2.1		27.1
Green Ext Time (p_c), s	9.4			0.0		23.7

Intersection Summary

HCM 6th Ctrl Delay 4.4

HCM 6th LOS A

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



CITY OF BLACK DIAMOND
PLANNING DIVISION
MASTER APPLICATION

EXHIBIT B

OFFICE USE ONLY

FILE #	
APPL TYPE	
FEE PAID	

24301 Roberts Dr, PO Box 599 Black Diamond, WA 98010
Phone: (360)886-2560, Fax: (360)886-2592

NAME OF PROJECT/DEVELOPMENT: Southeast Loop Connector Alternative Comprehensive Plan Amendment			
ADDRESS/LOCATION OF PROPERTY: Parcel No. 1321069018 (See attached plan set for additional information)			
OWNER NAME		ADDRESS	
CCD Black Diamond Partners LLC		3025 112th Ave NE Suite 100 Bellevue, WA 98004	
EMAIL	PHONE	FAX	
jwortman@oakpointe.com	(425) 898-2100	(425) 898-2139	
APPLICANT NAME		ADDRESS	
CCD Black Diamond Partners LLC		3025 112th Ave NE Suite 100 Bellevue, WA 98004	
EMAIL	PHONE	FAX	
jwortman@oakpointe.com	(425) 898-2100	(425) 898-2139	
CONTACT NAME		ADDRESS	
Justin Wortman		3025 112th Ave NE Suite 100 Bellevue, WA 98004	
EMAIL	PHONE	FAX	
jwortman@oakpointe.com	(425) 898-2100	(425) 898-2139	
BRIEF DESCRIPTION OF PROJECT:			
Comprehensive Plan Amendment and Rezone			
PARCEL #: 132106-9018; See attached legal description	<i>*Legal Description must be attached</i>	1/4 SEC: NE	SEC: 13
		TWN: 21	RANGE: 06
SIZE (ACRES/SQ FT): 48,600 sq ft		ZONING: MPD	COMP PLAN DESIGNATION: MPD Overlay +

EXISTING LAND USE: Vacant MPD

ADJACENT LAND USE: NORTH: SFR SOUTH: Vacant MPD/SFR
EAST: Vacant MPD/SFR WEST: Vacant MPD

DOES THE SITE CONTAIN ANY OF THE FOLLOWING ENVIRONMENTALLY SENSITIVE AREAS? CHECK ALL THAT APPLY:

FLOOD HAZARD AREA ☐ LANDSLIDE HAZARD AREA ☐ SEISMIC HAZARD AREA ☐
COAL MINE HAZARD AREA ☐ STEEP SLOPE HAZARD ☐ WETLANDS ☒ STREAMS ☐

I certify under penalty of perjury, under the laws of the State of Washington, that the foregoing and attached exhibits are true and correct. I further certify that I am the owner of the property described above or authorized to act on behalf of the above interested parties.

OWNER

PRINT NAME	See Attached
SIGNATURE	

APPLICANT/AGENT

PRINT NAME	See Attached
SIGNATURE	

CHANGES TO APPROVED APPLICATIONS WILL CONSTITUTE A NEW APPLICATION AND WILL BE SUBJECT TO FULL APPLICATION FEES.

**SOUTHEAST LOOP CONNECTOR ALTERNATIVE COMPREHENSIVE PLAN AMENDMENT
COMPREHENSIVE PLAN AMENDMENT AND REZONE
LEGAL DESCRIPTION**

PARCEL 4 CITY OF BLACK DIAMOND LOT LINE ADJUSTMENT NO PLN 19-0028
RECORDING NO 20190619900008 (BEING A PORTION OF NW QTR STR 13-21-06 AND
NE QTR STR 14-21-06).

**CITY OF BLACK DIAMOND
COMPREHENSIVE PLAN AMENDMENT AND REZONE
SIGNATURE PAGE**

Owner:

CCD Black Diamond Partners LLC, a Delaware limited liability company

By: Oakpointe LLC, its Manager

By: 
Brian Ross, Manager
Date: 3/2/2021

Applicant:

CCD Black Diamond Partners LLC, a Delaware limited liability company

By: Oakpointe LLC, its Manager

By: 
Brian Ross, Manager
Date: 3/1/2021

Purpose of Checklist: The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help the City of Black Diamond identify impacts from a proposal (and to reduce or avoid impacts from the proposal, if it can be done), and to help the City decide whether an EIS is required.

A. BACKGROUND

1. Name of proposed project, if applicable:

Comprehensive Plan Amendment Request – Southeast Loop Connector Alternative

2. Name of proponent:

CCD Black Diamond Partners LLC

3. Address and phone number of proponent and contact person:

Proponent:
CCD Black Diamond Partners LLC.

Contact:
Justin Wortman
CCD Black Diamond Partners LLC.
3025 112th Ave NE, Suite 100
Bellevue, WA 98004
(425) 898-2100

4. Date checklist prepared:

February 26, 2021

5. Agency requesting checklist:

City of Black Diamond

6. Proposed timing or schedule (including phasing, if applicable):

This proposal is for the 2021 Comprehensive Plan Amendment

7. Do you have any plans for future additions, expansions, or further activity related to or connected with this proposal? If yes, please explain.

If the Southeast Loop Connector Alternative is ultimately included in the Black Diamond Comprehensive Plan, the alternative may in the future, subject to permitting requirements, be used as a secondary access to the Lawson Hills Master Planned Development (MPD).

8. Environmental information that has been prepared, or will be prepared, directly related to this proposal.

- Comprehensive Plan Amendment – SE Loop Connector Alternative Traffic Analysis, dated 3/1/21, by Transpo Group.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by this proposal.

Currently, there are no other applications pending for approval related to this proposal.

10. List any governmental approvals or permits that will be needed for your proposal, if known.

This amendment proposal will need to be approved by the City.

11. Description of the proposal including the proposed uses and the size of the project and site.

The proposal is for a Black Diamond Comprehensive Plan (Comp Plan) amendment that would include in the Comp Plan an alternative to the SE Loop Connector identified in the adopted Comprehensive Plan. The SE Loop Connector Alternative is located between the future MPD road and Lawson Street (see attached Comp Plan Map Change). Therefore, text amendments are proposed to the Comprehensive Plan's Transportation Appendix for the plan sections titled Functional Classification System located on page A7-10; the Transportation Improvement Recommendations on page 19; and Table 0-9 on page 25. A map amendment is proposed for Figure 7-4 on page 47. **(Note: This is an addition to the future road projects list and does not preclude the implementation of the SE Loop Connector.)**

See attached documents for proposed text and map changes (in strikeout and highlight):

- Functional Classification System - Comp Plan Text Change 1
- Transportation Improvement Recommendations - Comp Plan Text Change 2
- Table 0.9 - Comp Plan Text Change 3
- Figure 7-4 - Comp Plan Map Change 1.

12. Location of the proposal. Provide a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if available.

The SE Loop Connector Alternative would be located in Township 21N, Range 6E, Section 13 (See attached Figure 7-4).

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one)** flat and rolling, hilly, steep slopes, mountainous.

The land that the road segment would traverse is fairly flat.

- b. What is the steepest slope on the site (approximate percent slope)?**

The steepest slope is approximately 6 percent.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

Based on the USDA Natural Resource Conservation Service Soil Survey, the soil type is Beausite gravelly sandy loam. Since the site is located within an urban growth area it is not considered prime farmland.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

There are no surface indications or history of unstable soils in the vicinity.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

Grading would occur to construct the road, install temporary construction erosion controls, and permanent stormwater runoff facilities. The approximate cut and fill amounts for the road alternative itself are 650 cubic yards of cut and 2,600 cubic yards of fill.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**

Limited erosion could occur as a result of the initial construction on-site; however, temporary erosion and sedimentation control (TESC) measures would be utilized during the construction phase to minimize potential erosion impacts (see 1h below). Temporary erosion and sedimentation control plans must be submitted to and approved by the City of Black Diamond prior to any clearing or grading activity.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

Approximately 21,600 square feet of impervious road surface would be created.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

The site would be stabilized consistent with an approved temporary erosion and sedimentation control (TESC) plan in compliance with the then-applicable DOE Stormwater Management Manual for Western Washington as amended in 2014 and City of Black Diamond requirements (BDMC 15.28). Temporary erosion and sedimentation control plans must be submitted to and approved by the City of Black Diamond prior to any clearing or grading activity. Construction stormwater would be managed per the TESC Plan and Stormwater Pollution Prevention Plan (SWPPP) prior to being discharged.

The TESC would include the use of best management practices (BMPs), which could include all or a combination of the following:

1. Construction activity should be scheduled or phased as much as possible to avoid earthwork activity during the wet season.
2. The winter performance of a site is dependent on a well-conceived plan for control of site erosion and stormwater runoff. The site plan should include ground-cover measures and staging areas. The contractor should be prepared to implement and maintain the required measures to reduce the amount of exposed ground.
3. Temporary erosion and sedimentation control (TESC) elements and perimeter flow control should be established prior to the start of grading.
4. During the wetter months of the year, or when significant storm events are predicted during the summer months, the work area should be stabilized so that if showers occur, it can receive the rainfall without excessive erosion or sediment transport. The required measures for an area to be "buttoned-up" would depend on the time of year and the duration that the area would be left unworked. During the winter months, areas that are to be left unworked for more than 2 days should be mulched or covered with plastic. During the summer months, stabilization would usually consist of seal-rolling the subgrade. Such measures would aid in the contractor's ability to get back into a work area after a storm event. The stabilization process also includes establishing temporary stormwater conveyance channels through work areas to route runoff to the approved treatment/discharge facilities.

5. All disturbed areas should be revegetated as soon as possible. If it is outside of the growing season, the disturbed areas should be covered with mulch. Straw mulch provides a cost-effective cover measure and can be made wind-resistant with the application of a tackifier after it is placed.

6. Surface runoff and discharge should be controlled during and following development. Uncontrolled discharge may promote erosion and sediment transport.

7. Soils that are to be reused around the site should be stored in such a manner as to reduce erosion from the stockpile. Protective measures may include, but are not limited to, covering stockpiles with plastic sheeting, or the use of silt fences around pile perimeters.

In addition to the approved TESC plan, the contractor would be monitored by the Washington State Department of Ecology under the National Pollutant Discharge Elimination System Permit (NPDES) General Stormwater Construction Permit. As part of the NPDES permit requirements, the contractor is required to keep a copy of the SWPPP on-site for reference. The SWPPP includes objectives to implement BMPs to minimize erosion and silt and sediment impacts from rainfall runoff during construction and to identify, reduce, eliminate, or prevent the pollution of stormwater, prevent violations of surface water quality, ground water quality, or sediment management standards, and prevent adverse water quality impacts during construction by controlling peak rates and volumes of stormwater runoff at the permittee's outfall and discharge locations. In addition, the contractor would provide a certified erosion control supervisor to be on site whenever earthwork or other activity that might result in turbid runoff is being performed.

2. Air

- a. **What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

During project construction, heavy equipment operation and vehicles would generate exhaust emissions. Additionally, dust particulates generated primarily by construction equipment and construction activities would be produced during the construction phase of this project. During paving operations odors from asphalt would be detectable to some people near the project site. There would be long-term emissions from vehicles using the completed alternative route.

- b. **Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.**

There are no known off-site sources of emissions or odors that would affect the road alternative.

- c. **Proposed measures to reduce or control emissions or other impacts to air, if any:**

To minimize the potential adverse impacts from emissions resulting from construction activities, Best Management Practices (BMPs) would be implemented to ensure that minimal amounts of dust and exhaust fumes leave the preliminary plat site. BMP measures may include street cleaning/sweeping, wheel washing, and watering of the site as necessary to help control dust and other particulates; and minimizing vehicle and equipment idling to reduce exhaust emissions at the site.

3. Water

- a. **Surface:**

- 1) **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

Lawson Creek is located on the road alignment and the SE Loop Connector Alternative would cross the creek. No work would occur in the water. The alignment would pass one Category IV wetland and may slightly encroach on the wetland buffer.

- 2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

Work would occur within 200 feet of Lawson Creek. However, no work would take place in the water as the SE Loop Connector Alternative would cross Lawson Creek via a bridge.

- 3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

No fill or dredge material would be placed in or removed from surface water or wetlands.

- 4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.**

The road alternative would not require any surface water withdrawals or diversions.

- 5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. If so, note location on the site plan.**

The proposal would cross the 100-year floodplain. FEMA lists the area around Lawson Creek as an area of minimal flood hazard (Zone X).

- 6) **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No waste materials would be discharged to surface waters.

b. Ground:

- 1) **Will groundwater be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

No ground water would be withdrawn. Some stormwater would infiltrate into the ground and the remainder would be sent to a stormwater system.

- 2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals ..; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

No waste materials would be discharged into the ground.

c. Water Run-off (including stormwater):

- 1) **Describe the source of run-off (including stormwater) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Rainfall is the only source of runoff. Stormwater would be collected in roadside catch basins and directed into the stormwater control system that would be constructed as part of the Lawson Hills Master Planned Development. Some stormwater (not captured by the catch basins) would run off the road surface and infiltrate into the ground.

- 2) **Could waste materials enter ground or surface waters? If so, generally describe.**

Construction activities such as fueling, and equipment operation and maintenance can create the potential for spills or minor leaks of fuel, oil, hydraulic fluid or other material into the soil that could make their way into the groundwater. There would be potential for waste materials from the completed road surface to enter groundwater via stormwater runoff.

- d. **Proposed measures to reduce or control surface, ground, and run-off water impacts, if any:**

A temporary erosion and control plan (TESC) and surface water pollution prevention plan (SWPPP) would be prepared for approval by the City of Black Diamond and Washington Department of Ecology (under the NPDES General Construction Stormwater permit) and implemented during construction. These plans contain BMPs for controlling surface and groundwater impacts during construction. See Section 1h above for more detail on the mitigation measures.

4. Plants

- a. **Check or circle types of vegetation found on the site:**

☒ **Deciduous trees:** Alder, maple, aspen, other bitter cherry, cascara
☒ **Evergreen trees:** Fir, cedar, pine, other hemlock
☒ **Shrubs**
☒ **Grass**
☒ **Pasture**
☐ **Crop or grain**
☐ **Wet Soil Plants:** Cattail, buttercup, bulrush, skunk cabbage, other
☐ **Water Plants:** Water Lily, eelgrass, milfoil, other
☐ **Other types of vegetation**

- b. **What kind and amount of vegetation will be removed or altered?**

Only the areas within the clearing limits would have vegetation removed. Areas outside of the clearing limits would retain existing vegetation. Evergreen and deciduous trees and shrubs would be removed.

- c. **List threatened or endangered species known to be on or near the site.**

There are no known threatened or endangered plant species on or near the site.

- d. **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**

The clearing limits would be delineated (using continuous flagging and orange barrier fencing) prior to clearing and grading to minimize vegetation removal.

5. Animals

- a. **Check or circle any birds and animals which have been observed on or near the site, or are known to be on or near the site:**

 X **Birds:** *hawk*, *heron*, *eagle*, *songbirds*, other:
 X **Mammals:** *deer*, *bear*, *elk*, *beaver*, other:
 X **Fish:** *bass*, *salmon*, *trout*, *herring*, *shellfish*,
 Other:

- b. **List any threatened or endangered species known to be on or near the site.**

According the U.S. Fish and Wildlife's Information for Planning and Consultation (IPaC) database (accessed online) there are no critical habitats at this location and no known threatened, endangered, or priority species known to be on the site.

- c. **Is the site part of a migration route? If so, explain.**

The project site lies within the migratory bird Pacific Flyway; however, the site is not known to contain critical habitat for migratory birds.

- d. **Proposed measures to preserve or enhance wildlife, if any:**

No measures are proposed.

6. Energy and Natural Resources

- a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

Energy in the form of diesel, gasoline and possibly electricity would be used during construction. Electricity would be used for lighting the roadway.

- b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The project will not affect the potential use of solar energy by adjacent properties.

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

Limiting idling construction equipment would reduce the amount of fuel used during construction.

7. Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste, that could occur as a result of this proposal? If so, describe.**

Construction equipment and activities such as fueling, and equipment operation (leaky equipment) and maintenance (leaky storage containers) can create the potential for spills or minor leaks of fuel, oil, hydraulic fluid or other material that could potentially pose a threat to environmental health. Project related construction activities and material handling/storage would meet all current local, county, state and federal regulations. The completed road would not result in any environmental health hazards.

- 1) **Describe special emergency services that might be required.**

No special emergency services would be needed.

2) Proposed measures to reduce or control environmental health hazards, if any:

State regulations regarding safety and the handling of hazardous materials would be enforced during the construction process. Equipment refueling areas would be located in areas where a spill could be quickly contained, and where the risk of the hazardous material entering ground water is minimized.

In order to reduce the risk of environmental health hazards during construction, the selected contractor would submit a Spill Prevention Control and Countermeasures Plan (SPCCP) with future permits. The SPCCP would include the handling of petroleum products and an emergency response procedure for any soil contaminated by a spill. The plan should include the use of fueling pads or berms located in areas where a spill could be quickly contained and where the risk of hazardous materials entering surface water is minimized, procedures to follow in case of spills, a maintenance plan to minimize leaky equipment, specify a staging area for vehicle maintenance, solid waste handling and disposal Best Management Practices (BMPs), and BMPs for any chemicals to be used or stored onsite during construction. State regulations regarding safety and the handling of hazardous materials will be followed during the construction process.

b. Noise

1) What types of noise exist in the area, which may affect your project (for example: traffic, equipment operation, other)?

There is no noise source that would affect the road project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Construction equipment and activities would create impact and prolonged duration noise during the construction period, which would vary in intensity depending on the equipment in use and type of activity. Construction activities on the site would temporarily increase the peak on-site noise levels. Once completed, there would be noise produced by vehicles on the road.

3) Proposed measures to reduce or control noise impacts, if any:

Construction activity would be limited to hours and days as specified by the Lawson Hills MPD Development Agreement dated December 12, 2011.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The site is currently pastureland with one residence. Surrounding property is mostly residential or vacant, wooded property.

b. Has the site been used for agriculture? If so, describe.

Fields located on the site have recently been plowed.

c. Describe any structures on the site.

There is one residence on the property; however, the road alignment would not impact the house.

d. Will any structures be demolished? If so, what?

No structures would be demolished.

e. What is the current zoning classification of the site?

The current zoning is R-4 and MPD.

f. What is the current comprehensive plan designation of the site?

The comprehensive plan designation for the site is Low Density Residential and Master Planned Development. The current transportation improvement plan attached to the Comprehensive Plan identifies the SE Loop Connector.

g. If applicable, what is the current shoreline master program designation of the site?

There is no shoreline designation on the site.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

There is a Category IV wetland on the site and Lawson Creek, both are environmentally sensitive areas.

i. Approximately how many people would reside or work in the completed project?

Not applicable.

j. Approximately how many people would the completed project displace?

Not applicable.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposal will be reviewed for compatibility with the Comprehensive Plan by the Community Development Department as part of the amendment process.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Not applicable.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Not applicable.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

Lighting would be provided along the roadway and would be approximately 20 feet in height.

- b. What views in the immediate vicinity would be altered or obstructed?**

No views would be obstructed. There would be a slight alteration in views of the site due to the road surface.

- c. Proposed measures to reduce or control aesthetic impacts, if any:**

No measures are proposed.

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**

Night lighting would be installed along the road for safety.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?**

There would be no light or glare that would be a safety hazard or interfere with views.

- c. What existing off-site sources of light or glare may affect your proposal?**

There are no off-site sources of light or glare that would affect the proposal.

- d. Proposed measures to reduce or control light and glare impacts, if any:**

No measures are proposed.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?**

There are several community parks in the vicinity of this site, including the Eagle Creek Community Park, Lake Sawyer Regional Park (undeveloped) and Ginder Creek Park (undeveloped). There are also a number of lakes in the general area including Lake Sawyer, Horseshoe Lake, Keevie Lake and Oak Lake that provide water-based recreational opportunities.

- b. Would the proposed project displace any existing recreational uses? If so, describe.**

No existing authorized recreational uses would be displaced.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

The road alternative would provide sidewalks for pedestrian and bicycle recreation. Sidewalks would be ADA compliant with curb ramps.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

There are no significant historic or cultural resources on the site.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

There are no known landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the project site.

- c. Proposed measures to reduce or control impacts, if any:**

The project would comply with all applicable local, state and federal laws.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

The SE Loop Connector Alternative would connect to Lawson Street and a not-yet-built portion of road.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The site is not currently served by public transit. The nearest Metro Transit Route is 143/907 that runs on SR 169 and stops at the intersection with Baker Street.

- c. How many parking spaces would the completed project have? How many would the project eliminate?**

No parking spaces would be added or eliminated.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

The project would not require new roads but would require a new intersection at Lawson Street.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The project would not occur in the immediate vicinity of water, rail or air transportation

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

Unknown at this time.

- g. Proposed measures to reduce or control transportation impacts, if any:**

During construction, workers and trucks with materials will travel to and from the site and could be timed to avoid peak traffic hours. For example, workers can arrive early in the morning before the AM peak hour and if possible, material trips can be scheduled to occur during off-peak hours. Flaggers, signage and barriers would be used to help general traffic avoid the construction zone. The contractor would be required to prepare and implement a traffic control plan during construction.

15. Public Services

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

During construction, there could be a slight increase in the potential demand for emergency medical services due to the operation of heavy construction equipment. The completed project would not result in an increase in the demand for public services.

- b. **Proposed measures to reduce or control direct impacts on public services, if any.**

No measures are proposed.

16. Utilities

- a. **Indicate utilities currently available at the site:**

Electricity is available at the site.

- b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

Electricity would be used for lighting on the finished project.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee: Justin Wortman

Position and Agency/Organization: Senior Project Manager, CCD Black Diamond Partners, LLC.

Date Submitted: February 26, 2021

A. Supplemental Sheet for Nonproject Actions

(IT IS NOT NECESSARY to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Construction of the proposal would cause temporary increases in diesel exhaust emissions from construction equipment and gasoline exhaust emissions from construction workers travelling to and from the site. During dry weather, construction earthwork may also result in dust generation. There would also be a temporary increase in construction noise. However, the construction period would be relatively short as compared to the SE Loop Connector, which would reduce the duration of construction-related impacts.

The proposal operation would result in stormwater runoff from the increase in impervious road surface, emissions to air from vehicle exhaust, and increased noise from vehicles moving on the road. There would be no release of toxic or hazardous substances.

Proposed measures to avoid or reduce such increases are:

The site will be stabilized consistent with an approved temporary erosion and sedimentation control (TESC) plan in compliance with the then-applicable DOE Stormwater Management Manual for Western Washington as amended in 2014 and City of Black Diamond requirements (BDMC 15.28). Temporary erosion and sedimentation control plans must be submitted to and approved by the City of Black Diamond prior to any clearing or grading activity. Construction stormwater will be managed per the TESC Plan and Stormwater Pollution Prevention Plan (SWPPP) prior to being discharged.

The TESC will include the use of best management practices (BMPs), which could include all or a combination of the following:

1. Construction activity should be scheduled or phased as much as possible to avoid earthwork activity during the wet season.
2. The winter performance of a site is dependent on a well-conceived plan for control of site erosion and stormwater runoff. The site plan should include ground-cover measures and staging areas. The contractor should be prepared to implement and maintain the required measures to reduce the amount of exposed ground.
3. Temporary erosion and sedimentation control (TESC) elements and perimeter flow control should be established prior to the start of grading.

4. During the wetter months of the year, or when significant storm events are predicted during the summer months, the work area should be stabilized so that if showers occur, it can receive the rainfall without excessive erosion or sediment transport. The required measures for an area to be “buttoned-up” will depend on the time of year and the duration that the area will be left unworked. During the winter months, areas that are to be left unworked for more than 2 days should be mulched or covered with plastic. During the summer months, stabilization will usually consist of seal-rolling the subgrade. Such measures will aid in the contractor’s ability to get back into a work area after a storm event. The stabilization process also includes establishing temporary stormwater conveyance channels through work areas to route runoff to the approved treatment/discharge facilities.

5. All disturbed areas should be revegetated as soon as possible. If it is outside of the growing season, the disturbed areas should be covered with mulch. Straw mulch provides a cost-effective cover measure and can be made wind-resistant with the application of a tackifier after it is placed.

6. Surface runoff and discharge should be controlled during and following development. Uncontrolled discharge may promote erosion and sediment transport.

7. Soils that are to be reused around the site should be stored in such a manner as to reduce erosion from the stockpile. Protective measures may include, but are not limited to, covering stockpiles with plastic sheeting, or the use of silt fences around pile perimeters.

In addition to the approved TESC plan, the contractor will be monitored by the Washington State Department of Ecology under the National Pollutant Discharge Elimination System Permit (NPDES) General Stormwater Construction Permit. As part of the NPDES permit requirements, the contractor is required to keep a copy of the SWPPP on-site for reference. The SWPPP includes objectives to implement BMPs to minimize erosion and silt and sediment impacts from rainfall runoff during construction and to identify, reduce, eliminate, or prevent the pollution of stormwater, prevent violations of surface water quality, ground water quality, or sediment management standards, and prevent adverse water quality impacts during construction by controlling peak rates and volumes of stormwater runoff at the permittee’s outfall and discharge locations. In addition, the contractor will provide a certified erosion control supervisor to be on site whenever earthwork or other activity that might result in turbid runoff is being performed.

To minimize the potential adverse impacts from emissions resulting from construction activities, Best Management Practices (BMPs) will be implemented to ensure that minimal amounts of dust and exhaust fumes leave the site. BMP measures may include the following: street cleaning/sweeping; wheel washing; installing stabilized rock construction entrances; watering of the site as necessary to help control dust and other particulates; covering trucks beds carrying soil material; and minimizing vehicle and equipment idling to reduce exhaust emissions at the site.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The proposal would have no effect on fish or marine life (stormwater would be treated prior to discharge). Only one parcel would be affected by the proposal and the route would not impact any wetlands or sensitive wildlife habitat on that property.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Stormwater would be treated prior to discharge into surface waters.

3. How would the proposal be likely to deplete energy or natural resources?

The proposal would use energy in the form of diesel, gasoline and possibly electricity during construction. Natural resources such as petroleum, aggregates (e.g., rock, sand, gravel), cement, and various metals (e.g., steel rebar) would be used in constructing the road and road elements (e.g., guard railings, light posts, walls, etc.).

Proposed measures to protect or conserve energy and natural resources are:

No measures are proposed.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

There are no environmentally sensitive areas along the proposal right-of-way except for Lawson Creek. The proposal alignment would cross the creek (similar to the SE Loop Connector).

Proposed measures to protect such resources or to avoid or reduce impacts are:

A bridge would be constructed to span across the creek with bridge supports that are located outside the ordinary high water mark. In this way, creek flow and fish passage would not be impeded.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

The proposal would not impact shoreline uses.

Proposed measures to avoid or reduce shoreline and land use impacts are:

No measures are proposed.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The proposal would not increase the demand for transportation or public services. There would be a slight increase in demand for electricity to operate lighting along the roadway for safety.

Proposed measures to reduce or respond to such demand(s) are:

The project itself would serve the demand for transportation circulation and access.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The proposal would not conflict with any local, state, or federal laws for protection of the environment.



CITY OF BLACK DIAMOND SENSITIVE AREA IDENTIFICATION FORM

This form identifies potential sensitive areas located on the subject property. This is a supplemental form to the sensitive area applications. Further study and or identification of sensitive areas may be required. Please complete the following information to the best of your ability.

Applicant: CCD Black Diamond Partners LLC		Permit #:
Parcel#: See attached legal	Site Address: Southeast Loop Connector Alternative	
Sensitive Areas Identified: ☐ Geologic Hazard Area ☐ Erosion Hazard Area ☒ Wetlands ☐ Flood Zone ☐ Aquifer Recharge ☐ Stream Corridor ☐ To my knowledge there are no sensitive areas on my property.		
Comments: Comprehensive Plan Amendment		
Signature: See Attached		Date: 3/1/2021

~For Official Use Only~

Reports Completed or Required: ☐ Sensitive Area Report ☐ Wetland Delineation Report ☐ Geotechnical Report
Inspection Results: ☐ No Sensitive Areas Present ☐ Sensitive Areas Present, but No Impact ☐ Sensitive Areas may be affected by proposal
Summary of Findings:

Signature: Natural Resources Director	Date:
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**SOUTHEAST LOOP CONNECTOR ALTERNATIVE COMPREHENSIVE PLAN AMENDMENT
COMPREHENSIVE PLAN AMENDMENT AND REZONE
LEGAL DESCRIPTION**

PARCEL 4 CITY OF BLACK DIAMOND LOT LINE ADJUSTMENT NO PLN 19-0028
RECORDING NO 20190619900008 (BEING A PORTION OF NW QTR STR 13-21-06 AND
NE QTR STR 14-21-06).

**SOUTHEAST LOOP CONNECTOR ALTERNATIVE COMPREHENSIVE PLAN AMENDMENT
COMPREHENSIVE PLAN AMENDMENT AND REZONE
SENSITIVE AREA IDENTIFICATION FORM
SIGNATURE PAGE**

Applicant:

CCD Black Diamond Partners LLC, a Delaware limited liability company

By: Oakpointe LLC, its Manager

By: 

Brian Ross, Manager

Date: 3/1/2021

MEMORANDUM

Date:	March 1, 2021	TG:	16450.00
To:	Andrew Williamson – City of Black Diamond		
From:	Mike Swenson, P.E., PTOE and Maris Fry, P.E. – Transpo Group		
cc:	Brian Ross and Justin Wortman – Oakpointe		
Subject:	Comprehensive Plan Amendment – SE Loop Connector Alternative		

This memorandum provides analysis evaluating the proposed inclusion of the SE Loop Connector Alternative in the City of Black Diamond's 2019 Comprehensive Plan. This memorandum includes the following information:

- Overview of the proposed Alternative
- Summary of pertinent EIS findings
- Operational impacts of the SE Loop Connector Alternative

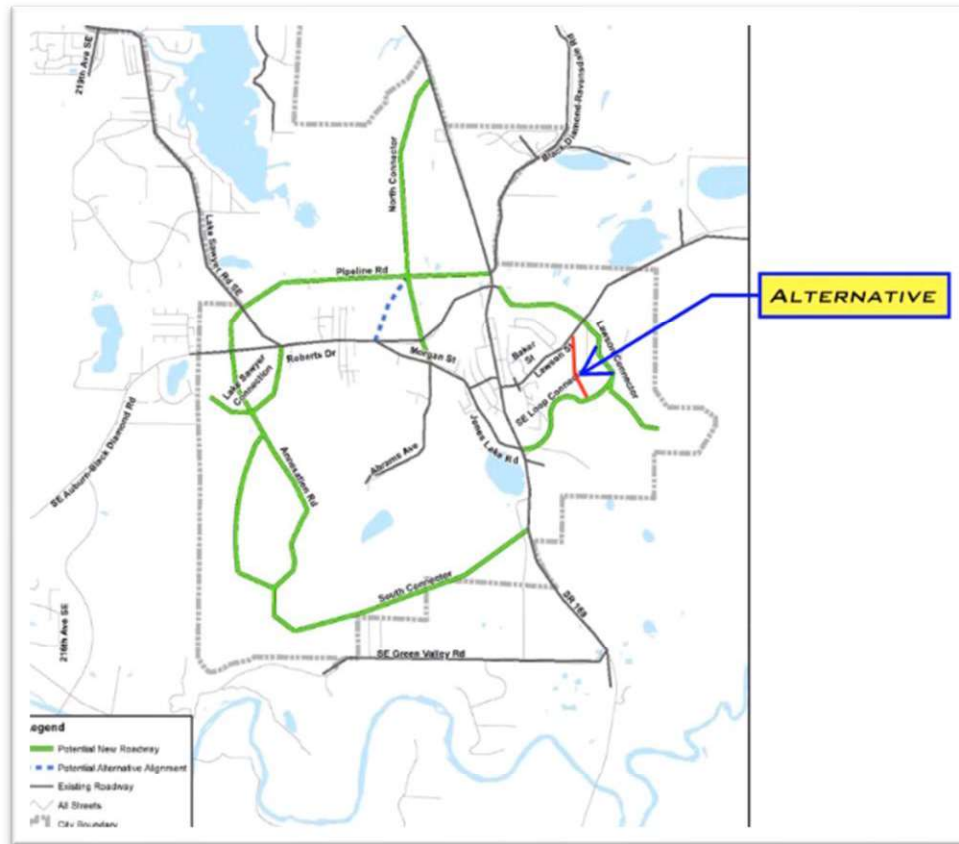
As detailed below, this analysis determined that the worst-case impacts of the proposed SE Loop Connector Alternative could be sufficiently mitigated through the addition of turn lanes at the intersections of SR 169/Baker Street and SR 169/Lawson Street.

Alternative Overview

As shown in Figure 1, the Comprehensive Plan currently identifies the SE Loop Connector as a connection between the Lawson Connector and SR 169. The identified SE Loop Connector Alternative is shown in Figure 1.

The SE Loop Connector was analyzed in the *Lawson Hills Technical Transportation Report (TTR)*, performed by Parametrix in 2009, which was used as the basis for the transportation-related EIS findings for the Lawson Hills MPD. To understand the worst-case impacts of the proposed SE Loop Connector Alternative, the volume projections outlined in the Lawson Hills TTR were updated assuming all traffic shifts from the SE Loop Connector to the Alternative. Based on the anticipated trip assignment and re-routing associated with the Alternative, volume and operations impacts were limited to the following intersections:

1. SR 169/Baker Street
2. SR 169/Lawson Street
3. SR 169/Jones Lake Road
4. Railroad Avenue/Baker Street



Summary of Pertinent EIS Findings

The analysis contained within the Lawson Hills TTR developed traffic volume projections and defined impacts for the Lawson Hills MPD, as well as the collective impacts of the Lawson Hills and Ten Trails MPDs. Based on this analysis, the following mitigations were identified at the above study intersections for full build-out conditions of both MPDs. The channelization and traffic control for the intersections are also summarized in Figure 1.

- **SR 169/Baker Street:** Traffic signal and northbound left-turn lane
- **SR 169/Lawson Street:** Traffic signal and southbound left-turn lane
- **SR 169/Jones Lake Road:** Traffic signal and northbound, westbound, and southbound left-turn lanes
- **Railroad Avenue/Baker Street:** No mitigations necessary

Traffic Operations Analysis

To determine the worst-case impacts of the SE Loop Connector Alternative, traffic volume projections from the Lawson Hills TTR were revised to account for re-routed traffic. This analysis conservatively assumed that all traffic routed through the SE Loop Connector in the EIS is re-routed to Lawson Street. Figure 1 depicts the re-routed volumes and the adjusted full-build traffic volumes.

Using these adjusted volumes, intersection level of service (LOS) was evaluated at the study intersections. The channelization and traffic control associated with the EIS-identified mitigations were used as a baseline in order to determine if additional mitigations would be necessary. For the intersection of SR 169/Jones Lake Road, channelization and traffic control consistent with existing conditions was assumed to determine if introduction of the SE Loop Connector Alternative would result in mitigations no longer being necessary.

Weekday PM peak hour levels of service and delays were calculated at study intersections based on existing peak hour factors (PHFs) and methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board). As shown in Table 1, the re-routed traffic volumes result in the need for additional improvements beyond those identified in the EIS at two intersections: SR 169/Baker Street and SR 169/Lawson Street. Additionally, mitigations are still required at the intersection of SR 169/Jones Lake Road.

In order to meet WSDOT's LOS D or better standard, additional southbound and eastbound right-turn lanes would be needed at SR 169/Baker Street and an additional westbound right-turn lane would be needed at SR 169/Lawson Street. Additionally, the traffic signal and northbound left-turn lane would need to remain at the intersection of SR 169/Jones Lake Road. Consistent with the EIS, no mitigations would be necessary at the intersection of Railroad Avenue/Baker Street. The mitigated channelization and traffic control assumptions are summarized in Figure 1. With these additional mitigations in place, the intersections are projected to operate at LOS D or better, as shown on Table 1.

Table 1. Traffic Analysis Summary – Removal of SE Loop Connector

Intersection	LOS Standard	Mitigated Traffic Control (EIS)			Mitigated Traffic Control (Removal of SE Loop Connector)		
		LOS ¹	Delay ²	WM ³	LOS	Delay	WM
1. SR 169/Baker Street	D	F	129	-	D	53	-
2. SR 169/Lawson Street	D	F	170	-	D	48	-
3. SR 169/Jones Lake Road	D	F	53	EB	A	4	-
4. Railroad Avenue/Baker Street	C	B	12	WB	No Change		

Source: HCM 6th Edition and Transpo Group, 2020

1. Level of service (A – F) as defined by the Highway Capacity Manual (HCM) 6th Edition, Transportation Research Board

2. Average delay per vehicle in seconds

3. Worst movement (WM) reported for two-way stop sign traffic control

Conclusions

This analysis determined that the worst-case impacts of the SE Loop Connector Alternative can be adequately mitigated assuming the following:

- Implementation of additional improvements beyond those identified in the EIS at two intersections:
 - **SR 169/Baker Street:** New southbound and eastbound right-turn lanes
 - **SR 169/Lawson Street:** New westbound right-turn lane
- Implementation of limited improvements (construction of a traffic signal and northbound left-turn lane) at the intersection of **SR 169/Jones Lake Road**

Additionally, improvements would remain unnecessary at the intersection of Railroad Avenue/Baker Street.



	Weekday PM Peak Hour Traffic Volumes		Change
	Re-Routed	With SE Loop Connector Alternative	
1 SR 169/ Baker St			
2 SR 169/ Lawson St			
3 SR 169/ Jones Lake Rd			 Signal was proposed at intersection
4 Railroad Ave/ Baker St			No change relative to existing

Traffic Analysis in Support of SE Loop Connector Alternative

Comprehensive Plan Amendment

Attachment A:
LOS Worksheets

HCM 6th Signalized Intersection Summary

1: SR-169 & Baker St

02/26/2021

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	288	252	802	1392	104
Future Volume (veh/h)	60	288	252	802	1392	104
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	297	260	827	1435	107
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	38	182	218	1502	1166	87
Arrive On Green	0.14	0.14	0.19	1.00	0.68	0.68
Sat Flow, veh/h	270	1291	1781	1870	1719	128
Grp Volume(v), veh/h	360	0	260	827	0	1542
Grp Sat Flow(s),veh/h/ln	1565	0	1781	1870	0	1847
Q Serve(g_s), s	22.5	0.0	15.5	0.0	0.0	108.5
Cycle Q Clear(g_c), s	22.5	0.0	15.5	0.0	0.0	108.5
Prop In Lane	0.17	0.82	1.00			0.07
Lane Grp Cap(c), veh/h	220	0	218	1502	0	1253
V/C Ratio(X)	1.64	0.00	1.20	0.55	0.00	1.23
Avail Cap(c_a), veh/h	220	0	218	1502	0	1253
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.13	0.13	0.00	1.00
Uniform Delay (d), s/veh	68.8	0.0	55.9	0.0	0.0	25.8
Incr Delay (d2), s/veh	305.7	0.0	93.9	0.2	0.0	111.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.7	0.0	13.3	0.1	0.0	83.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	374.5	0.0	149.8	0.2	0.0	136.8
LnGrp LOS	F	A	F	A	A	F
Approach Vol, veh/h	360			1087	1542	
Approach Delay, s/veh	374.5			36.0	136.8	
Approach LOS	F			D	F	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	133.0		27.0		20.0	113.0
Change Period (Y+Rc), s	4.5		4.5		4.5	4.5
Max Green Setting (Gmax), s	128.5		22.5		15.5	108.5
Max Q Clear Time (g_c+I1), s	2.0		24.5		17.5	110.5
Green Ext Time (p_c), s	8.1		0.0		0.0	0.0
Intersection Summary						
HCM 6th Ctrl Delay			128.8			
HCM 6th LOS			F			

HCM 6th Signalized Intersection Summary

2: SSR-169/SR-169 & Lawson St

02/26/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↗	↘	
Traffic Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Future Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1811	1811	1811	1870	1870	1870
Adj Flow Rate, veh/h	1	1	1	179	0	395	1	682	173	532	1190	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	2	2	2
Cap, veh/h	71	70	56	90	0	132	23	698	177	518	1526	6
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.50	0.50	0.50	0.58	1.00	1.00
Sat Flow, veh/h	332	569	450	485	0	1071	0	1393	353	1781	1861	8
Grp Volume(v), veh/h	3	0	0	574	0	0	856	0	0	532	0	1195
Grp Sat Flow(s), veh/h/ln	1351	0	0	1556	0	0	1747	0	0	1781	0	1869
Q Serve(g_s), s	0.0	0.0	0.0	19.6	0.0	0.0	7.6	0.0	0.0	46.5	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.0	19.8	0.0	0.0	76.7	0.0	0.0	46.5	0.0	0.0
Prop In Lane	0.33		0.33	0.31		0.69	0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	197	0	0	222	0	0	898	0	0	518	0	1533
V/C Ratio(X)	0.02	0.00	0.00	2.59	0.00	0.00	0.95	0.00	0.00	1.03	0.00	0.78
Avail Cap(c_a), veh/h	197	0	0	222	0	0	898	0	0	518	0	1533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.09
Uniform Delay (d), s/veh	61.5	0.0	0.0	71.4	0.0	0.0	39.0	0.0	0.0	33.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	726.3	0.0	0.0	20.6	0.0	0.0	19.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	54.0	0.0	0.0	37.5	0.0	0.0	18.7	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	0.0	0.0	797.7	0.0	0.0	59.6	0.0	0.0	53.3	0.0	0.4
LnGrp LOS	E	A	A	F	A	A	E	A	A	F	A	A
Approach Vol, veh/h	3			574			856			1727		
Approach Delay, s/veh	61.6			797.7			59.6			16.7		
Approach LOS	E			F			E			B		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	51.0	84.7		24.3		135.7		24.3				
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s	46.5	80.2		19.8		131.2		19.8				
Max Q Clear Time (g_c+H), s	19.5	78.7		2.2		2.0		21.8				
Green Ext Time (p_c), s	0.0	0.9		0.0		19.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	170.2											
HCM 6th LOS	F											

HCM 6th TWSC

3: SR-169 & Railroad Ave

02/26/2021

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	108	38	837	1323	1
Future Vol, veh/h	0	108	38	837	1323	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	111	39	863	1364	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2306	1365	1365	0	-	0
Stage 1	1365	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	42	180	503	-	-	-
Stage 1	237	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	36	180	503	-	-	-
Mov Cap-2 Maneuver	36	-	-	-	-	-
Stage 1	202	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	52.9	0.6		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	503	-	180	-	-	
HCM Lane V/C Ratio	0.078	-	0.619	-	-	
HCM Control Delay (s)	12.8	0	52.9	-	-	
HCM Lane LOS	B	A	F	-	-	
HCM 95th %tile Q(veh)	0.3	-	3.5	-	-	

HCM 6th TWSC

4: Railroad Ave/Morgan St & Baker St

02/26/2021

Intersection						
Int Delay, s/veh	7.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	359	44	16	329	132
Future Vol, veh/h	13	359	44	16	329	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	370	45	16	339	136
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	867	53	0	0	61	0
Stage 1	53	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	323	1014	-	-	1542	-
Stage 1	970	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	246	1014	-	-	1542	-
Mov Cap-2 Maneuver	246	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	11.8	0		5.7		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	914	1542	-	
HCM Lane V/C Ratio	-	-	0.42	0.22	-	
HCM Control Delay (s)	-	-	11.8	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	2.1	0.8	-	

HCM 6th Signalized Intersection Summary

1: SR-169 & Baker St

02/26/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	60	288	252	802	1392	104
Future Volume (veh/h)	60	288	252	802	1392	104
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1811	1811	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	297	260	827	1435	107
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	2	2	2	2
Cap, veh/h	102	321	313	1655	1321	1119
Arrive On Green	0.06	0.06	0.20	1.00	0.71	0.71
Sat Flow, veh/h	1725	1535	1781	1870	1870	1585
Grp Volume(v), veh/h	62	297	260	827	1435	107
Grp Sat Flow(s),veh/h/ln	1725	1535	1781	1870	1870	1585
Q Serve(g_s), s	5.6	6.3	18.2	0.0	113.0	3.4
Cycle Q Clear(g_c), s	5.6	6.3	18.2	0.0	113.0	3.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	102	321	313	1655	1321	1119
V/C Ratio(X)	0.61	0.92	0.83	0.50	1.09	0.10
Avail Cap(c_a), veh/h	194	403	313	1655	1321	1119
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.46	0.46	1.00	1.00
Uniform Delay (d), s/veh	73.5	62.0	60.1	0.0	23.5	7.4
Incr Delay (d2), s/veh	5.7	23.7	8.6	0.5	51.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	17.5	10.5	0.2	64.7	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	79.2	85.7	68.7	0.5	75.2	7.6
LnGrp LOS	E	F	E	A	F	A
Approach Vol, veh/h	359			1087	1542	
Approach Delay, s/veh	84.6			16.8	70.5	
Approach LOS	F			B	E	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	146.2			13.8	28.7	117.5
Change Period (Y+Rc), s	4.5			4.5	4.5	4.5
Max Green Setting (Gmax), s	133.0			18.0	15.5	113.0
Max Q Clear Time (g_c+I1), s	2.0			8.3	20.2	115.0
Green Ext Time (p_c), s	8.1			0.9	0.0	0.0
Intersection Summary						
HCM 6th Ctrl Delay			52.7			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary

2: SSR-169/SR-169 & Lawson St

02/26/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔		↔	↔	
Traffic Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Future Volume (veh/h)	1	1	1	174	0	383	1	662	168	516	1154	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1811	1811	1811	1870	1870	1870
Adj Flow Rate, veh/h	1	1	1	179	0	395	1	682	173	532	1190	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	6	6	6	2	2	2
Cap, veh/h	30	29	15	133	0	667	23	698	177	518	1526	6
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.50	0.50	0.50	0.39	1.00	1.00
Sat Flow, veh/h	0	237	119	710	0	1610	0	1393	353	1781	1861	8
Grp Volume(v), veh/h	3	0	0	179	0	395	856	0	0	532	0	1195
Grp Sat Flow(s), veh/h/ln	356	0	0	710	0	1610	1747	0	0	1781	0	1869
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	19.8	7.6	0.0	0.0	46.5	0.0	0.0
Cycle Q Clear(g_c), s	19.8	0.0	0.0	19.8	0.0	19.8	76.7	0.0	0.0	46.5	0.0	0.0
Prop In Lane	0.33		0.33	1.00		1.00	0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	74	0	0	133	0	667	898	0	0	518	0	1533
V/C Ratio(X)	0.04	0.00	0.00	1.35	0.00	0.59	0.95	0.00	0.00	1.03	0.00	0.78
Avail Cap(c_a), veh/h	74	0	0	133	0	667	898	0	0	518	0	1533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.12	0.00	0.12
Uniform Delay (d), s/veh	62.3	0.0	0.0	73.5	0.0	36.4	39.0	0.0	0.0	49.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	198.0	0.0	1.4	20.6	0.0	0.0	21.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	12.8	0.0	12.4	37.5	0.0	0.0	22.8	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	0.0	0.0	271.4	0.0	37.8	59.6	0.0	0.0	70.5	0.0	0.5
LnGrp LOS	E	A	A	F	A	D	E	A	A	F	A	A
Approach Vol, veh/h		3			574			856			1727	
Approach Delay, s/veh		62.5			110.6			59.6			22.1	
Approach LOS		E			F			E			C	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	51.0	84.7		24.3		135.7		24.3				
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s	46.5	80.2		19.8		131.2		19.8				
Max Q Clear Time (g_c+1.0), s	19.8	78.7		21.8		2.0		21.8				
Green Ext Time (p_c), s	0.0	0.9		0.0		19.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				48.4								
HCM 6th LOS				D								

HCM 6th Signalized Intersection Summary

3: SR-169 & Railroad Ave

02/26/2021



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	108	38	837	1323	1
Future Volume (veh/h)	1	108	38	837	1323	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	39	863	1364	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	2		334	1697	1696	1
Arrive On Green	0.00	0.00	0.91	0.91	0.91	0.91
Sat Flow, veh/h	912	0	398	1870	1869	1
Grp Volume(v), veh/h	2	0	39	863	0	1365
Grp Sat Flow(s), veh/h/ln	1825	0	398	1870	0	1870
Q Serve(g_s), s	0.1	0.0	3.7	7.9	0.0	25.1
Cycle Q Clear(g_c), s	0.1	0.0	28.8	7.9	0.0	25.1
Prop In Lane	0.50	0.00	1.00			0.00
Lane Grp Cap(c), veh/h	5		334	1697	0	1697
V/C Ratio(X)	0.41		0.12	0.51	0.00	0.80
Avail Cap(c_a), veh/h	328		334	1697	0	1697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.8	0.0	6.5	0.8	0.0	1.6
Incr Delay (d2), s/veh	45.9	0.0	0.7	1.1	0.0	4.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.1	0.0	0.4	0.5	0.0	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	95.7	0.0	7.2	1.9	0.0	5.8
LnGrp LOS	F		A	A	A	A
Approach Vol, veh/h	2	A		902	1365	
Approach Delay, s/veh	95.7			2.1	5.8	
Approach LOS	F			A	A	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	95.2			4.8		95.2
Change Period (Y+Rc), s	4.5			4.5		4.5
Max Green Setting (Gmax), s	73.0			18.0		73.0
Max Q Clear Time (g_c+I1), s	30.8			2.1		27.1
Green Ext Time (p_c), s	9.4			0.0		23.7

Intersection Summary

HCM 6th Ctrl Delay 4.4

HCM 6th LOS A

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

TECHNICAL MEMORANDUM

DATE: July 22, 2021
TO: Mona Davis, City of Black Diamond
FROM: Alex Atchison, PE, PTOE
SUBJECT: Black Diamond - Proposed Comprehensive Plan Amendment - Review Comments
CC: Seth Boettcher, City of Black Diamond
Emily Adams, City of Black Diamond
PROJECT NUMBER: 214-3043-029 Task 37
PROJECT NAME: Black Diamond - Proposed Comprehensive Plan Amendment

This memorandum provides comments on Oakpointe's proposed amendments to the City of Black Diamond's Comprehensive Plan and supporting traffic analysis, dated March 1, 2021.

Comment #1: We concur with the trip redistribution described in Transpo Group's "Comprehensive Plan Amendment – SE Loop Connector Alternative" technical memo (March 1, 2021) to reflect the proposed SE Loop Connector Alternative.

Comment #2: The transportation analysis notes that a traffic signal and a northbound left-turn lane were identified in the *Lawson Hills Technical Transportation Report (TTR)*, (Parametrix, 2009) as mitigation for impacts to the intersection of SR 169/Baker Street. Table 19 in the Lawson Hill TTR identifies only a signal as mitigation at the intersection of SR 169/Baker Street. In Table 17 of the *Ten Trails and Lawson Hills Master Planned Development Phase 1B Traffic Monitoring Report*, prepared by Transpo Group in September 2020, additional improvements at SR 169/Baker Street are identified, including an eastbound left-turn refuge lane and a northbound left-turn lane.

However, as the traffic memo refers specifically to "pertinent EIS findings," if a northbound left-turn lane is needed to mitigate impacts at SR 169/Baker Street under the proposed SE Loop Connector Alternative this would be an additional improvement beyond those identified in the EIS. We recommend the traffic memo be updated to reflect the northbound left-turn lane as an additional improvement.

Comment #3: The SE Loop Connector Alternative will create a new intersection with Lawson Street that was not evaluated as part of the EIS. We recommend the traffic memo be updated to show the forecasted level of service operations at this new intersection.

Comment #4: We concur with the proposed text and map changes proposed for the comprehensive plan.