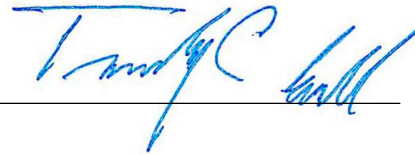


CITY OF STEVENSON  
**ROCK CREEK COVE HOSPITALITY SITE IMPROVEMENTS**  
SITE PLAN APPLICATION

**CONSULTING ENGINEER'S REPORT**

June 10, 2020



**A. GENERAL DISCUSSION**

**1. Description:** The request is to construct a hospitality facility on a vacant site between Rock Creek Drive and Rock Creek Cove. The site is currently undeveloped and was previously used for lumber operations of an unknown type. The development is proposed to occur in three phases. The first phase includes sixteen short-term rental units (four quad buildings). The second phase will include a commercial venue/meeting space of unknown size. The third phase is proposed as five townhouse units.

**2. Water Service:** Public water is available on Rock Creek Drive by means of a 6-inch ductile iron water main per City of Stevenson records. No modification to the public water system is proposed with this development. An on-site private water system and public fire service is proposed. All water improvements shall be designed and constructed in accordance with the City of Stevenson's Engineering Design and Construction standards (public) and the Uniform Plumbing Code (private).

**3. Sanitary Sewer Service:** Public sewer is available in Rock Creek Drive by means of an 8-inch sewer. No modification to the public sewer system is proposed with this development based on the preliminary plans. A private sewer system is proposed to serve the development. All sanitary sewer service improvements shall be designed and constructed in accordance with the City of Stevenson's Engineering Design and Construction standards and the Uniform Plumbing Code.

The sanitary sewer system is proposed to connect to the existing sewer pipe without a manhole. City engineering standards require connections to use manholes with pipe sizes 8" and larger.

**4. Street System:** Rock Creek Drive is classified as a major collector and has been improved with curb and sidewalk along the frontage of the site. The development proposes to use the existing driveway that swerves the site and the existing driveway has adequate sight distance in both directions. No improvements or modifications are proposed to the existing driveways.

On-site circulation appears adequate to serve the proposed development; however no turnaround is proposed. City of Stevenson Street Design Standards require cul-de-sacs on all public and private streets. The length of the dead-end access drive is approximately 450'. Hammerhead turnarounds may be used in lieu of a cul-de-sac provided that the street serves six or less lots and the street is less than 200' in length, and shall have a minimum depth of 30 feet. Although the length of the drive exceeds 200', since this development is not a single-family residential development, a hammerhead turnaround that is clearly signed as a "No Parking" area would also be appropriate.

**5. Storm Drainage:** All stormwater systems will need to be designed and constructed in accordance with City of Stevenson's Engineering Design and Construction standards, the Department of Ecology's 1992 Stormwater Management Manual for the Puget Sound Basin, and the Uniform Plumbing Code.

This project is considered a "New Development" project for stormwater thresholds, as the development is greater than 5000 square feet, with greater than One(1) acre of land disturbing activity. Minimum Requirements 1-11 apply.

A Preliminary TIR was submitted with the application providing additional information on the intended stormwater management approach. The preliminary application shows the site being managed through the use of new catch basins and bioretention/infiltration/treatment swales, with outfalls to Rock Creek Cove. The proposed bioretention facilities were designed using WWHM2012 per the DOE Stormwater Manual. They are designed to infiltrate at least 91% of the runoff through the treatment soil and are considered enhanced treatment. Per the DOE manual, the level of treatment required for the subject project is basic treatment.

The proposed biofiltration swales will treat stormwater runoff, which will be discharged to Rock Cove, a large water body along the north shore of the Columbia River. There are no negative water quality impacts anticipated downstream of the project site and no off-site analysis or mitigation is required.

All stormwater facilities constructed to manage runoff onsite shall be privately owned and maintained. Infiltration testing completed by GN Northern, Inc. on the proposed site indicated that subsurface soils have adequate infiltration capacity.

**6. Grading & Erosion Control:** A Geotechnical Engineering Report dated January 13, 2020, by GN Northern, Inc. was submitted for this development and provided information regarding subsurface conditions, infiltration, geologic hazards, slope stability, seismic design, and grading recommendations. A grading and erosion control plan shall be required, and proper erosion control measures shall be maintained throughout construction. The plan shall include all recommendations for grading provided in the Geotechnical Report.

## **B. CONCLUSIONS:**

1. The City's water and sanitary sewer systems currently have capacity available to provide the anticipated domestic and fire protection supply and sanitary sewer services necessary for the proposed development.
2. Stormwater facilities designed and constructed in accordance with the City's regulations can adequately manage and control runoff from this site.
3. The street system has capacity to serve the development and site access meets standards and the proposed access to the City street meets access standards.
4. Information contained within the provided Geotechnical Report indicate the development is feasible as proposed.

**C. RECOMMENDED CONDITIONS OF APPROVAL:**

1. The design and construction of water and sewer systems, streets, storm drainage systems, site grading and erosion control plans shall be in accordance with City of Stevenson Engineering Design and Construction Standards, and applicable provisions of the Uniform Plumbing Code.
2. The fire service line to the proposed fire hydrant shall be designed and constructed to City of Stevenson water standards for public facilities, and the applicant shall establish a 15'-wide public water easement encompassing the proposed fire hydrant service.
3. Either a cul-de-sac turnaround shall be provided at the end of the access drive having a curb radius of 41', or a hammerhead turnaround having a minimum depth of 30' shall be provided at the end of the access drive. The turnaround area shall be signed as a "No Parking" area, with curbs painted red.
4. The sanitary sewer connection to the public sewer shall be made using a manhole.
5. All recommendations provided in the Geotechnical Engineering Report dated January 13, 2020, by GN Northern, Inc. shall be followed for design and construction
6. All onsite stormwater facilities shall remain in private ownership and be maintained privately. Ownership and Maintenance responsibility shall be clearly shown on the Final Engineering plans.
7. An approved grading and erosion control plan shall be provided, and temporary sedimentation and erosion control measures shall be maintained throughout construction.

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By: Wallis Engineering