EXHIBIT 9.j: Divoky Property Connection Feasibility Analysis

September 16, 2026 Job No. 2090-004-022

Mr. Joshua Ranes
City of Poulsbo Engineering Department
200 NE Moe St
Poulsbo, WA 98370

RE: City Engineer Exemption Connection to Parcel 252601-2-034-2002
(Divoky Property)
Pinnacle at Liberty Bay Preliminary Plat and Planned Residential Development
P-06-20-25-03

Dear Mr. Ranes:

ESM Consulting Engineers, LLC is requesting an exemption from the City's connectivity requirement for the Divoky property south of the proposed Pinnacle at Liberty Bay development.

The request is being made in relation to PMC 17.80.060(B)(6)(a-d) and is based on the criteria that the revised design provides the same result, or a better one, without creating safety or operational issues, without causing maintenance or cost problems, and in a way that is allowed by City, state, and federal requirements. The overall site design is also intended to meet code requirements for vehicle, traffic, and pedestrian safety, sight distance, emergency access, and utility service.

PMC 17.80.060(B)(6)The City Engineer may exempt the requirement for street connectivity under the following circumstances:

A. There are existing and available connections to collector or arterial streets

The Divoky property has fronting access along 500 feet of Johnson Parkway NE, a collector roadway.

B. The existing development and ownership pattern, site and/or surrounding area's topography make connectivity technically and physically unfeasible

There are two physical (not necessarily feasible) areas for a connection to the Divoky property from the proposed Pinnacle at Liberty Bay plat. The feasibility of each is discussed below. Refer to enclosed figure for a depiction.

<u>Connection #1, from Pinnacle at Liberty Bay Road C</u>
The proposed Pinnacle at Liberty Bay Road C is situated approximately 140 LF north of the Divoky property. Pinnacle Plat Road C is designed at elevation 230 at

its lowest point where it is adjacent to the Divoky property. This low point is approximately 130 feet north of the Divoky property line and 48 feet higher in elevation. Extending a road across this distance holding the maximum allowed slope of 12% would result in the road being elevated approximately 32 feet above existing grade at the Divoky property.

Result: Road stub would be elevated too high at the Divoky property line.

Connection #2, from Sunrise Ridge at Southeast Corner of Pinnacle at Liberty Bay
This connection location was originally identified by City staff. However, analysis of the site geometry reveals that establishing a public street connection to Sunrise Ridge Avenue NE to the Divoky property is infeasible under City and State design criteria. Two different options off of Sunrise Ridge were evaluated. The findings of each are detailed below:

Connection #2 - Option A

This option considered a future public right-of-way connection to the Divoky property near the southeast corner of the Pinnacle Plat. However, a connection in this location would not meet the City's minimum intersection spacing requirements.

Section 2, Item 11 of the City of Poulsbo Construction Standards requires at least 125 feet of spacing between intersections. For this location, the spacing from Johnson Parkway is measured using the 'access spacing and corner clearance' methods in WSDOT Design Manual Chapter 520. Under those methods, the distance is measured along the main road from the outside edge of the roundabout's traveled way to the centerline of the proposed connection.

The enclosed figure shows that after applying the required 125-foot clearance from the Johnson Parkway roundabout, only 80 feet remains between the proposed connection and the City-approved Audrey Estates intersection. Since the City also requires 125 feet of spacing from that adjacent intersection, there is not enough distance available to place a compliant public street connection between Audrey Estates and the Johnson Parkway NE roundabout.

Connection #2 - Option B

The infeasibility of Option A led to the consideration of an intersection directly at the Audrey Estates connection creating a 4-way intersection. The location of a future connection at this intersection presents a new issue, entering sight distance challenges. This is a challenge for particularly a right-turn maneuver onto Sunrise Ridge Ave NE where a driver would be required to look left up Sunrise Ridge Ave NE.

Under AASHTO Case B2 (Right Turn from a Stop) for a 25-mph design speed, the baseline required Intersection Sight Distance on flat ground is 240 feet. This metric relies on a 6.5-second time gap (t_g) for a driver stopped on the minor leg to

evaluate a gap, execute a right turn, and accelerate up to speed without forcing oncoming major-road traffic to decelerate.

The resulting sight distance triangle from Connection Option 2B has been mapped on the enclosed Figure 1. It is revealed that the oncoming major road approach (Sunrise Rive Ave) introduces a driver orientation hazard. Because the intersection would be placed on the inside of a horizontal curve, a driver stopped at the stop bar preparing to turn right is forced to rotate their line of sight well beyond 90 degrees (approximately 120 degrees) from the forward vehicle axis to scan for oncoming traffic approaching down Sunrise Ridge Ave NE.

Standard human factors guidelines (*FHWA Highway Design Standards* and *NCHRP Report 600*) establish that comfortable driver neck rotation is limited to 60 to 75 degrees. Requiring a driver to look back past 90 degrees is a movement that is particularly restrictive or impossible for older drivers or those with neck mobility limitations.

Additionally, at sight angles exceeding 90 degrees, a driver's line of sight no longer passes through the vehicle's side window. Instead, oncoming traffic is completely obstructed by the vehicle's driver-side B-pillar, headrest, and door frame.

These sight distance failures created by an access at the Audrey Estates renders this 4-way intersection layout geometrically undesignable and structurally unsafe.

A separate evaluation was done to see if the Option 2B connection could be further skewed to reduce the 120-degree viewing angle. However, the potential ROW connection is already sitting at the maximum 30-degree skew (60-degree intersection) as allowed by the city. This skew angle is depicted on Figure 1.

C. Temporary emergency vehicle access is provided, and street connectivity will occur in the future

- The Divoky property is currently undeveloped. Emergency vehicle access is provided along the existing 500+ feet of Johnson Parkway NE. Future street connectivity can additionally be provided from Johnson Parkway NE.

D. The street connection is not identified on the comprehensive plan transportation map series

- The City's transportation maps do not show a future public street to the Divoky property.

Conclusion

A physical connection to the Divoky property would violate intersection-spacing requirements within the functional area of the Johnson Parkway roundabout and create critical entering sight-distance hazards.

The Divoky property retains 500 feet of direct access along Johnson Parkway NE, which preserves emergency access, and no street connection is identified on the City's Comprehensive Plan Map. Granting this exemption therefore upholds the intent of City code without compromising public safety or operational efficiency.

Therefore, the applicant requests that the City Engineer approve this exemption from the street connectivity requirement for the Pinnacle at Liberty Bay project.

Should you have any questions or require additional information, please do not hesitate to contact us at (253) 838-6113.

Respectfully,

ESM CONSULTING ENGINEERS, LLC

BRANDON LOUCKS, P.E.
Project Manager

Encl. Figure 1

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A PORTION OF THE SE 1/4 OF SECTION 23, TWP. 26 N., RGE. 1 E.,WM

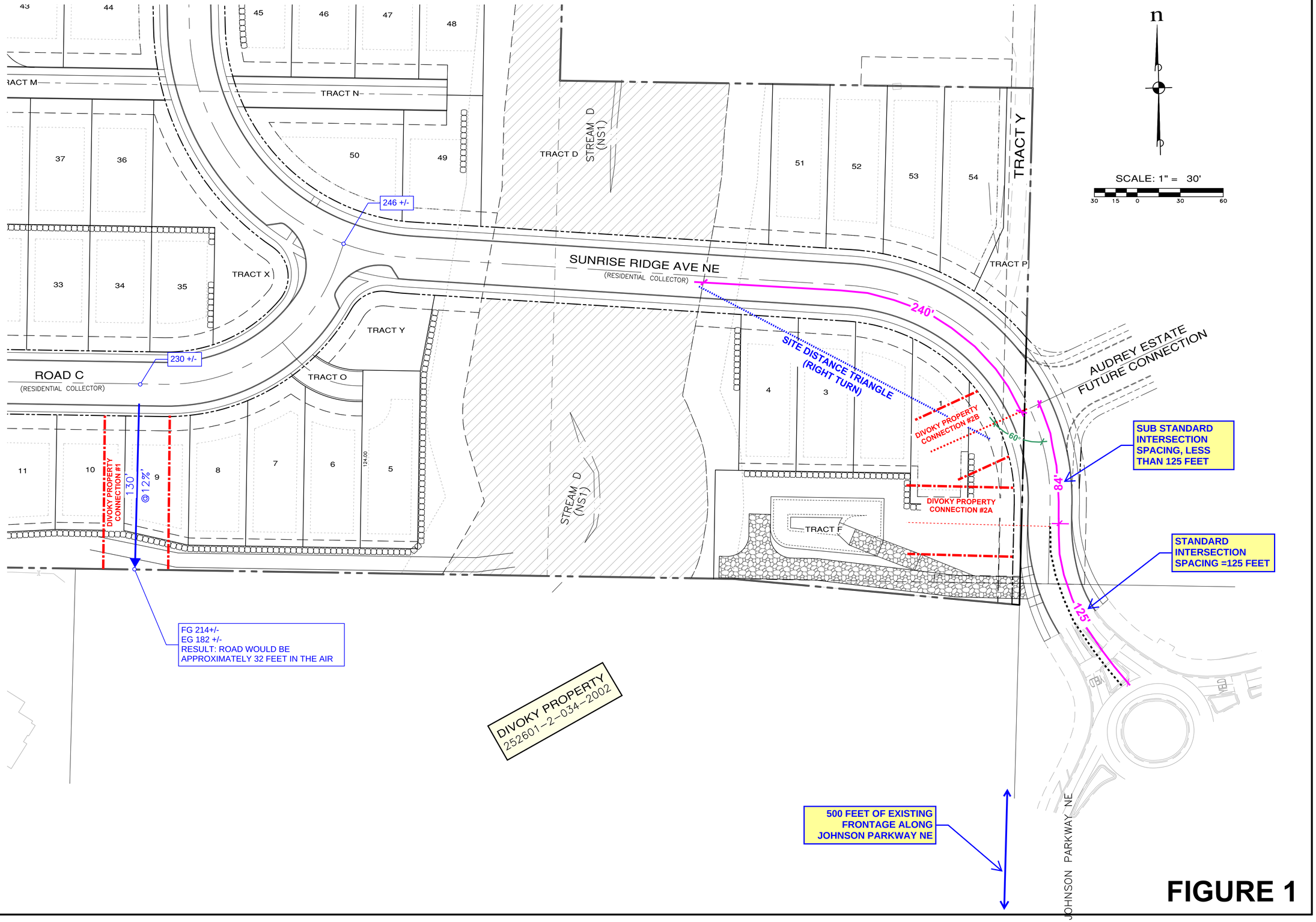

FIGURE 1

REVISIONS

NO.	DESCRIPTION/DATE	BY

ESM CONSULTING ENGINEERS LLC
32001 32nd Ave S, Suite 200
Federal Way, WA 98001
FEDERAL WAY (253) 838-6113
LYNNWOOD (425) 297-9900
www.esmcivil.com
Civil Engineering | Land Surveying | Land Planning
Public Works | Project Management | Landscape Architecture

MONTEBANC MANAGEMENT, LLC

PINNACLE AT LIBERTY BAY SUBDIVISION

CITY OF POULSBO DIVOKY PROPERTY ACCESS FEASIBILITY WASHINGTON

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