



## MEMORANDUM

TO: COMMISSIONERS  
FROM: NANCY LOCKETT, P.E.  
DATE: MAY 6, 2021  
SUBJECT: BEACH OUTFALL RECONNAISSANCE ON  
APRIL 1, 2021  
PORT LUDLOW DRAINAGE DISTRICT,  
JEFFERSON COUNTY, WASHINGTON  
G&O #21429.00

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### Attendees:

Deborah Helleson, Port Ludlow Drainage District Commissioner  
Brian Belmont, Ludlow Maintenance Committee  
Russ Lowry, Yard Dogs  
Nancy Lockett, P.E., Gray & Osborne, Inc.

The inspection of the beach outfall structures at Pope Way, Libby Court, Montgomery Court (between 70 and 120 Montgomery Court), North Montgomery Court (between 192 and 200 Montgomery Court), and the Oak Bay outfall west of the marina was scheduled for April 1, 2021, during a favorable low tide.

### POPE WAY OUTFALL

The outfall structure was installed in 2007 and includes a 14-inch diameter HDPE overbank discharge pipe and a 48-inch diameter catch basin/diffuser structure on the beach below the bluff. The outfall structure including the overbank pipe is in good condition. The outfall structure is surrounded by dense vegetation and driftwood which does not impact the function of the outfall. The amount of vegetation around the outfall does not appear have changed appreciably since the last inspection in 2017. The outfall structure does not appear to need debris removal at this time.



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**Pope Way Outfall – April 1, 2021**



**Pope Way Outfall – July 13, 2017  
(Outfall Structure Behind Driftwood and Vegetation)**



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## **LIBBY COURT OUTFALL**

The Libby Court outfall structure was constructed in 2004. The structure consists of a 32-inch diameter HDPE overbank discharge pipe and a 60-inch diameter concrete catch basin/diffuser structure on the beach adjacent to the bluff. The outfall structure including overbank pipe is in good condition. The condition of the beach at the base of the structure has not changed significantly since 2017. The structure does not need cleaning at this time. The bank immediately behind the overbank pipe and outfall structure does not appear to have changed significantly since 2017.



**Libby Court Outfall – April 1, 2021**



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**Libby Court Outfall – July 13, 2017**

**MONTGOMERY COURT OUTFALL (BETWEEN 70 AND 120 MONTGOMERY COURT)**

This 18-inch diameter HDPE outfall was identified on the 2017 beach walk. The outfall was not previously known to the District. The Ludlow Maintenance Committee (LMC) does not have any information regarding who installed the culvert or when it was installed. It appears that flow from Basin E1 (northeast end of Jackson Lane) and Oak Bay Road is conveyed between 81 and 101 Montgomery Court and is discharged along with flow from Basin E2 (Montgomery Court north from Montgomery Lane) to a catch basin in front of 81 Montgomery Court then into the outfall. The culvert pipe appears to have been installed below grade on the LMC parcel. The condition of the pipe at the outfall is excellent and has not changed since 2017. There is no indication of erosion or potential for damage to the outfall at the beach.



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**Montgomery Court Outfall – May 23, 2017  
(Between 70 and 120 Montgomery Court)**

**NORTH MONTGOMERY COURT OUTFALL (BETWEEN 192 AND  
200 MONTGOMERY COURT)**

This 18-inch diameter HDPE outfall collects drainage from Basin C2 in the north portion of the District (gully between Jackson and Foster Lanes, Oak Bay Road, and the north end of Montgomery Court). This culvert was installed by homeowners on an LMC parcel. The outfall was designed by Dick Reagan, P.E. The outfall daylights at the top of the bank between 192 and 200 Montgomery Court in a thickly wooded area and appears to continue above grade to the beach. The condition of the pipe at the outfall is excellent. There is no indication of erosion or potential for damage to the outfall at the beach. The condition of the outfall has not changed since 2017.



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**Montgomery Court Outfall – April 1, 2021  
(Between 192 and 200 Montgomery Court)**



**Montgomery Court Outfall – July 13, 2017  
(Between 192 and 200 Montgomery Court)**



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Several locations of severe bluff erosion and extensive tree topping/cutting were identified on the beach as shown in the following pictures.



**Bluff Erosion and Tree Topping**



**Bluff Erosion**



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**Bluff Erosion**



**Bluff Erosion**

### **OAK BAY ROAD OUTFALL**

A corrugated metal pipe (36-inch diameter) located on the beach west of the marina discharges runoff from the ditch on the north side of Oak Bay Road. The ditch originates at Oak Bay Road and Walker Way. The date of installation is unknown but most likely was installed prior to development of the plat. The lower approximately 10 feet of the outfall is detached and is laying on the beach. It appears the bottom of the detached pipe was corroded prior to being detached from the outfall. The visible portion of the outfall



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also appears to have areas of corrosion on the bottom of the pipe. The soil under the remaining pipe is eroded.



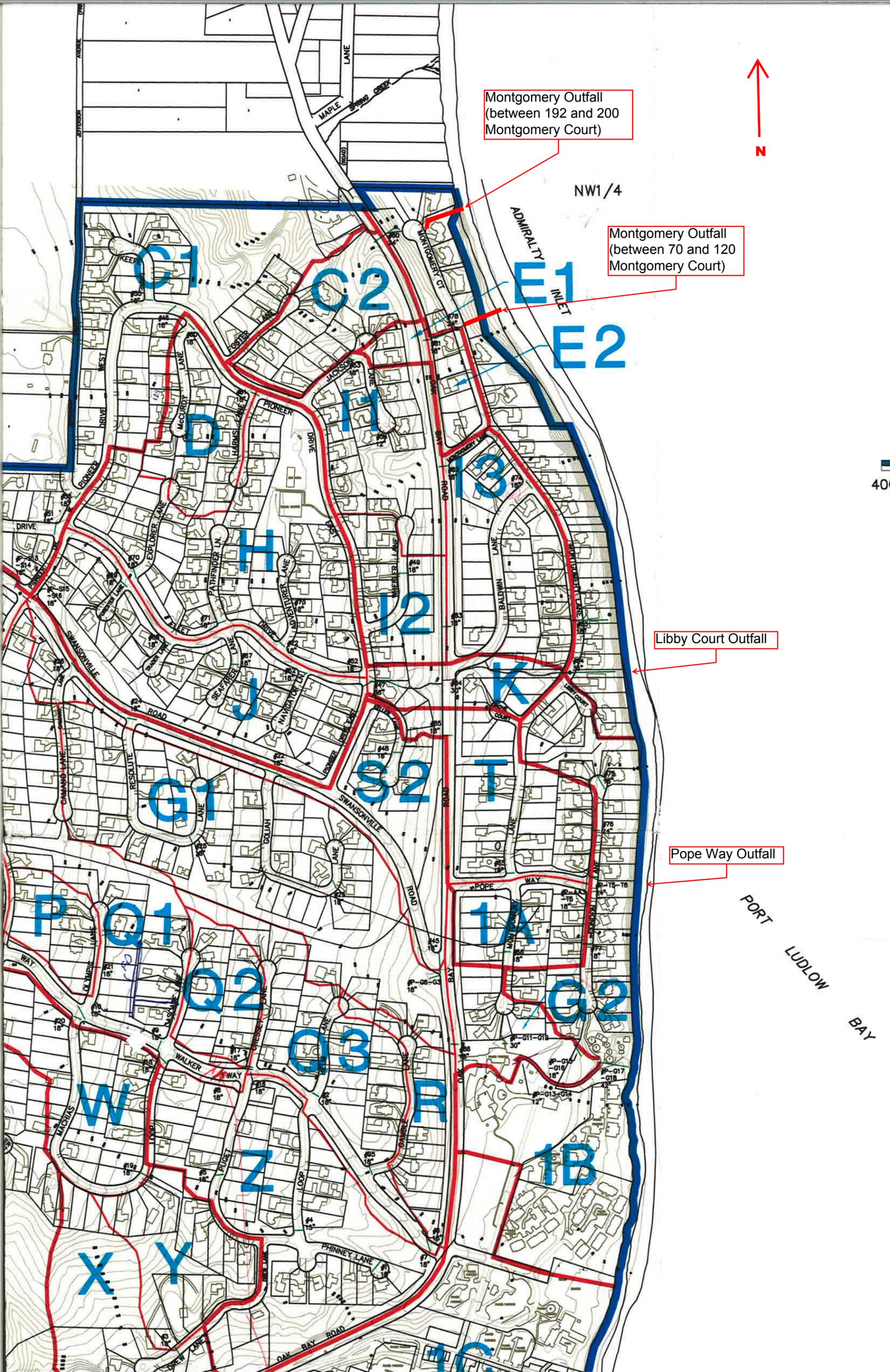
**Oak Bay Outfall – April 1, 2021**



**Detached Portion of Oak Bay Outfall Pipe – April 1, 2021**

The attached figures show the locations of the outfalls.

NEL/hh  
Encl.



Montgomery Outfall  
(between 192 and 200  
Montgomery Court)



NW1/4

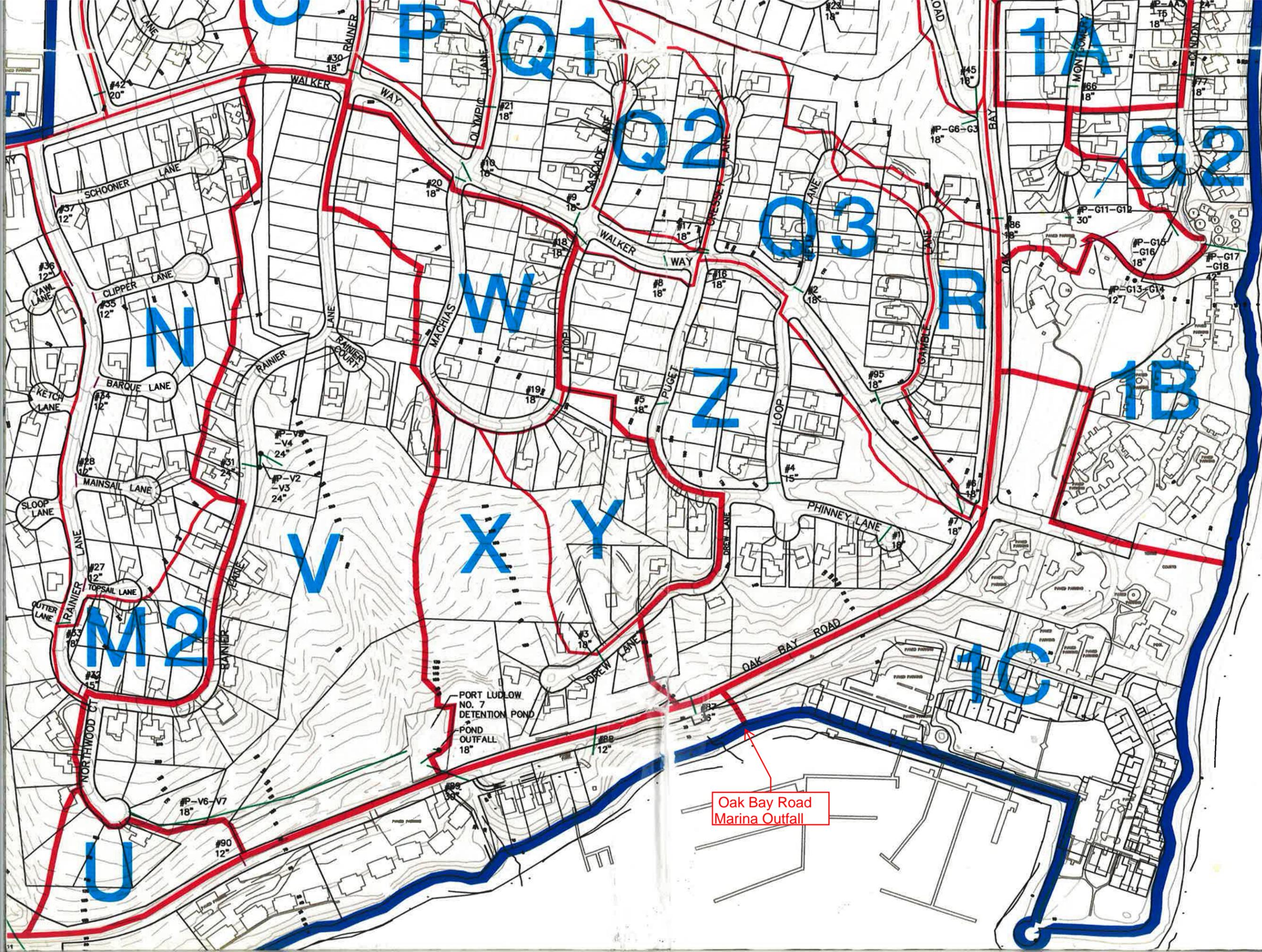
Montgomery Outfall  
(between 70 and 120  
Montgomery Court)

ADMIRALTY  
E1  
INLET  
E2

Libby Court Outfall

Pope Way Outfall

PORT  
LUDLOW  
BAY



121  
Condon



Oak Bay Road  
Marina Outfall