



MEMORANDUM

TO: COMMISSIONERS
FROM: NANCY LOCKETT, P.E.
DATE: SEPTEMBER 11, 2017
SUBJECT: BEACH OUTFALL RECONNAISSANCE ON
MAY 23 AND JULY 13, 2017
PORT LUDLOW DRAINAGE DISTRICT,
JEFFERSON COUNTY, WASHINGTON
G&O #17426.00

Attendees (May 23, 2017): Don Forbes, Interim Chairman
Allen Uyeda, Commissioner
Bruce Eddy, Resident
Nancy Lockett, P.E., Gray & Osborne, Inc.

Attendees (July 13, 2017): Walt Cairns, Resident
Nancy Lockett, P.E., Gray & Osborne, Inc.

The inspection of the beach outfall structures at Pope Way and Libby Court was scheduled for May 23 during a favorable low tide. In addition to inspection of the two outfalls that were installed by the District, we wanted to locate the outfall that originates at the Montgomery Court cul-de-sac (LMC Parcel 990900019). The presence of this outfall was recently brought to the attention of the District. The outfall from the north end of Montgomery Court was not located during the beach walk on May 23. A previously unknown outfall located between 70 Montgomery Court and 120 Montgomery Court on LMC Property (Parcel 990900019) was located. A second beach walk was conducted on July 13 to locate the Montgomery Court cul-de-sac outfall.

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 has increased since the last beach walk in 2013. The outfall structure does not appear to need debris removal at this time.



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Pope Way Outfall – August 20, 2013



Pope Way Outfall – May 23, 2017



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**Pope Way Outfall – July 13, 2017
(outfall structure behind driftwood and vegetation)**

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 2013. 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 2013. The fence at the top of the bank that was installed at the time the outfall was constructed appears to be stable, with no significant change in alignment since 2013.



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Libby Court Outfall – August 20, 2013



Libby Court Outfall – July 13, 2017



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Interior Libby Court Outfall – July 13, 2017



Libby Court Outfall Top of Bank – August 20, 2013



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Libby Court Outfall Top of Bank – July 13, 2017

MONTGOMERY COURT OUTFALL (BETWEEN 70 AND 120 MONTGOMERY COURT)

This 18-inch-diameter HDPE outfall was not previously known to the District. The LMC does not have any information regarding the culvert. 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. There is no indication of erosion or potential for damage to the outfall at the beach. The beach walk on May 23 terminated at this outfall since we thought this was the outfall from the north end of Montgomery Court.



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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 Lane and Foster Lane, 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.



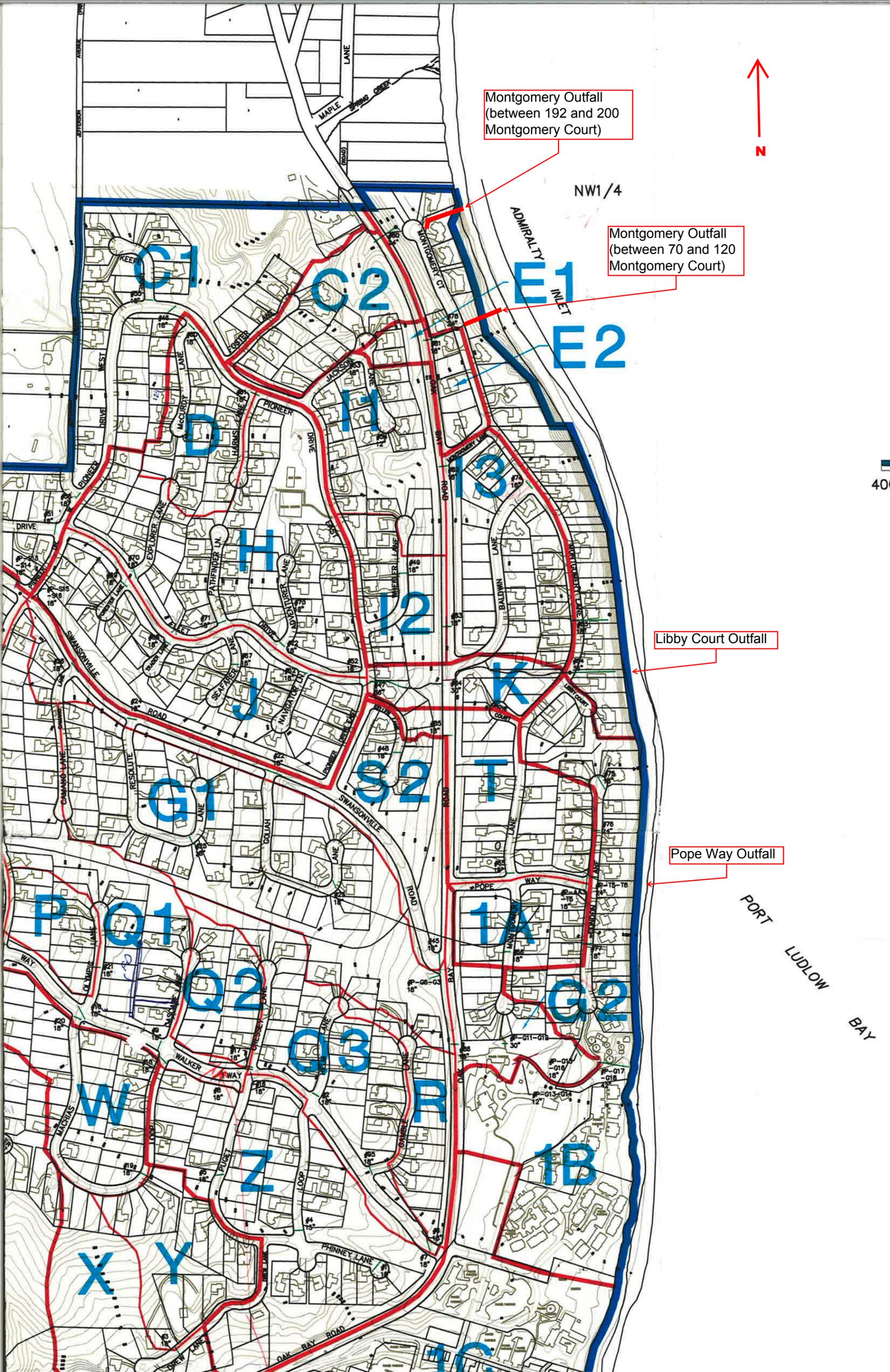
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**Montgomery Court Outfall – July 13, 2017
(between 192 and 200 Montgomery Court)**

The attached figure shows 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
INLET

E1
E2

40

Libby Court Outfall

Pope Way Outfall

PORT
LUDLOW
BAY