

Deep Bay Improvement District

Hydrant & Standpipe Maintenance Report

Spring 2026 | Prepared by Core Water Management Ltd. | Operator of Record: Adam Norman CWP CWWP

Section 1 — Completed Repairs

ID	Location	Work Completed
H-1	5031 Mountainview Rd	Replaced 1× 2.5" nozzle gasket. Applied cap grease (3 caps).
H-5	5141 Myhres Rd	Replaced 1× 2.5" nozzle gasket.
H-7	5181 Gainsberg Rd	Replaced 1× 4" O-ring.
H-16	Marina	Replaced 1× 2.5" nozzle gasket. Replaced 4× 4" O-rings.
H-19	5349 Deep Bay Dr	Replaced 1× 2.5" nozzle gasket.
H-21	5439 Deep Bay Dr	Replaced 1× 2.5" nozzle gasket.
H-33	4891 Thompson Clarke E	Replaced 1× 2.5" nozzle gasket.
H-34	4830 Faye Rd	Replaced 2× 2.5" nozzle gaskets.
H-39	4867 Ocean Trail Rd	Replaced 1× 2.5" nozzle gasket.
H-46	55 Jamieson Rd	Replaced 1× 2.5" nozzle gasket.
H-47	Blackbeard / TCE	Replaced 1× 2.5" nozzle gasket.
H-48	Blackbeard / Mapleguard	Replaced 1× 2.5" nozzle gasket.
H-50	4709 Mapleguard Dr	Replaced 1× 2.5" nozzle gasket.
H-56	4565 Mapleguard Dr	Replaced 1× 2.5" nozzle gasket.
H-58	4477 Mapleguard Dr	Replaced 2× 2.5" nozzle gaskets. Replaced 1× 4" O-ring.
SP8	85 Privateer Dr	Replaced 1× 2.5" nozzle gasket. Isolation valve failure on Jun 2; Isolation valve replaced Jun 4. The 2-1/2" pipe leading to the standpipe was found to be leaking on start up. Excavated and replaced Jun 8.

Section 2 — Outstanding Deficiencies

ID	Location	Priority	Deficiency & Required Action	Notes
SP1	254 Sabina Rd	High	Gate valve failed closed, standpipe non-operational. Requires excavation and replacement of gate valve.	Outside archaeological zone.
H-10	Gainsberg / Hembrough	High	Isolation valve broken, hydrant could not be flushed. Requires excavation and repair or installation of new isolation valve.	Inside archaeological zone — permit required before excavation.
H-31	4971 Thompson Clarke E	Medium	Hydrant very stiff to operate. Requires full tear down and internal lubrication.	—
H-32	128 Melvin Dr	Medium	Barrel drain hole partially blocked, draining slowly. Likely requires reaming. Monitor; ream at next scheduled tear down.	—
H-40	Blue Heron / Ocean Trail	Medium	Isolation valve does not close fully and is very stiff to operate. Requires tear down and grease of valve and hydrant.	—

ID	Location	Priority	Deficiency & Required Action	Notes
H-50	4709 Mapleguard Dr	Medium	Stiff clunk on opening, internal wear or debris. Requires tear down and grease.	—
H-51	4615 Thompson Clarke E	Medium	Stiff clunk on opening. Requires tear down and grease.	—
H-56	4565 Mapleguard Dr	Low	Small leak through flange gasket at hydrant base. Not urgent, replace gasket at next scheduled tear down.	—
H-58	4477 Mapleguard Dr	Medium	Isolation valve very tough to close, required many cycles to seat. All 3 internal gasket seals need replacing at next tear down.	—
H-39	4867 Ocean Trail Rd	Low	Slight leak through bonnet gasket. Monitor; replace bonnet gasket at next tear down.	—
H-29	5091 Shoreline Dr	Low	Small ongoing leak in isolation valve. Exercised valve during inspection, improved but not fully sealed. Monitor at next inspection.	—
SP3	Crome Point Rd END	Medium	Standpipe not draining. Requires excavation and drilling of new drain hole.	<i>Outside archaeological zone, inside buffer zone — confirm buffer requirements before excavation.</i>
SP4	5532 Deep Bay Dr	Medium	Standpipe isolation valve leaking. Valve requires replacement.	—
H-3	5070 Gainsberg Rd	Low	Isolation valve very deep, valve key extension was fabricated for this valve specifically. Barrel not draining, needs to be torn down and reamed out.	—
H-6	5165 Gainsberg Rd	Low	Isolation valve very stiff, exercised during inspection, closes fully and opens fully. Monitor stiffness at next inspection; grease if no improvement.	—
H-49	4688 Moors Dr	Low	Ditch culvert clogged under driveway at 4688 Moors Dr, limited flush duration during program.	—

Section 3 — Standpipes Not Included in Flushing

The standpipes located along Deep Bay Drive in between each hydrant are not part of the flushing program for the following reasons.

- They are not part of the Deep Bay Fire Departments fire fighting program. They only use the 4” pumper ports of the fire Hydrants (As confirmed by Fire Chief George Lenz)
- They are not end of line flush points. The standpipes that are included in the flushing program are located at water main dead ends and are necessary to fully clean out the lines.
- We have no records of the last time they were opened which poses a high risk of valve failure. Furthermore, they are inside the archaeological zone, and a valve failure would require excavation. My recommendation is that they are left until the districts Multi Application Permit is approved.

Section 4 — Capital Infrastructure Recommendation

Proposed Flushing Point: Main Exiting Well 2 (Island Highway / Hembrough Area)

Background

Standpipe SP2, located at 7730 Island Highway W, is the only service point on the north side of the Island Highway in the DBID system. It is supplied by a long run of 38mm service line branching off the distribution main near Well 2. Well 2 is currently inactive. There is no existing flush point on the 150mm main running from the Gainsberg/Hembrough area up to Well 2, nor anywhere between Well 2 and the SP2 service connection.

Current Flushing Limitation

The only path for water to reach SP2 is from the reservoir, the full length of Gainsberg Road, up the 150mm Hembrough Road main, and back up to Well 2, a considerable distance. The 38mm service line connecting Well 2 to SP2 is far too small to flush the 150mm main effectively; any flow through the 38mm line produces negligible velocity of approximately 0.5 ft/sec (The minimum velocity to scour is 2.5ft/sec.) As a result, the main segment from Gainsberg/Hembrough to Well 2 cannot be adequately flushed under the current infrastructure, and SP2 itself can only be flushed through a 38mm line. The very sandy discharge observed at SP2 during the Spring 2026 program is consistent with a long, dead-end main that has not been effectively flushed.

Recommendation

Install a properly sized flushing point (minimum 50mm, ideally 75mm blow-off assembly) on the 150mm main at or immediately adjacent to the Well 2 site. This would enable:

1. A direct flush of the 150mm main from Gainsberg/Hembrough up to Well 2, producing adequate pipe velocity for effective sediment scour in that segment.
2. A secondary short flush of the 38mm service line from Well 2 to SP2, adequately purging the small-diameter branch.
3. A reliable flushing point to serve the north-highway section of the system in future annual programs without dependence on the undersized 38mm service line.