

January 19, 2015

Terry Caffey  
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**RE: Wetland Assessment on Tax Parcel #'s 555630-0068, 555630-0069 and 5556300-0067; Located at 16410 NE 47<sup>th</sup> Street, Redmond, WA 98052; My Job # 21501.**

Dear Mr. Caffey:

On Sunday morning January 11, 2015, Chris Holcomb (supporting wetland biologist) and I performed a Wetland Assessment on the above-noted three tax parcels. Weather conditions were overcast, not raining and approximately 45 degrees. It rained during the previous 24 hours. The preceding December had a typical amount of rainfall. My Wetland Assessment findings and conclusions are as follows:

**I. Findings:**

1. The three tax parcels comprise a rectangular-shaped site. The site is accessed from SE 47<sup>th</sup> Street via a narrow paved driveway that runs east to west in the middle of the site. The site contains several large pastures, separated by white three-rail fences. There is also a plant nursery, which appears to be irrigated as evidenced by the hose bibs and irrigation piping throughout the pastures. Halfway up the driveway is a white barn / garage. At the west end of the driveway is a home, carport and paved parking turnaround.
2. Prior to 1970, the site was used by sheep. From the 1970s to 2000, the site was used by horses. In early 2014, much of the site's pastures were transformed into a plant nursery.
3. The site is almost entirely surrounded by single-family housing, except for two public right-of-ways to the east (NE 47<sup>th</sup> Street) and north (164<sup>th</sup> Court NE). Some of the surrounding homes were built in the past 5-15 years, whereas some were built 30-50 years ago. The site slopes down from southwest to northeast at a 13% average slope. Virtually the entire site is sloped, except for the two paved turnarounds.
4. Constructed storm drainage systems observed onsite include:
  - The home's downspouts are tightlined underground to an unknown location.
  - West of the home is a 100-foot long washed rock pathway that appears to be a French Drain. It may have been constructed to intercept sheet flow from the side slope toward the west property line and beyond. It's unknown if this possible drainage system has a pipe and/or outlet.
  - There is a several hundred foot long drainage ditch immediately south of the paved driveway. This ditch appears to rarely convey stormwater runoff.
  - There is a several hundred foot long drainage ditch just inside the site's south property line that slopes down west to east. This ditch collects stormwater runoff from upslope housing (backyards, downspouts, etc.) and conveys it east. Near the driveway entry, the drainage ditch slopes into a cobble depression. This depression may have a culvert which would convey stormwater north to an offsite catch basin. The culvert underneath the cobble was not found.
  - Near the paved barn entrance is a plastic 8-inch diameter culvert, but its outfall location was not found.
5. The purpose of my site investigation was to evaluate for the presence of wetlands. Redmond Zoning Code (RZC) 21.78 defines wetlands as; *"Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals,*

*detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands."*

6. More succinctly, if an area has positive indicators for all three wetland criteria (hydrophytic vegetation, wetland hydrology and hydric soils), then the area is considered wetland, unless an exemption (see definition above) is applicable. These criteria were investigated for onsite.
7. Hydrophytic Vegetation: Predominantly, the site contains facultative to upland vegetation. Several hedges are present such as a row of tall mature Douglas fir trees south of the home and a row of laurel shrubs along the north property line. Mature big leaf maple trees are present in the site's southwest corner. Landscaping such as rhododendrons exist near the home. The two pastures contain a combination of typical hydroseed varieties such as red clover, velvet grass, Kentucky bluegrass and poa, that surrounded the nursery plants. There was a patch of horsetail. Observed hydrophytic vegetation included creeping buttercup, but in a small quantity. The hydrophytic vegetation indicator was almost entirely absent.
8. Wetland Hydrology: There were several locations where the wetland hydrology indicator was met onsite, but for the most part, the site did not meet the hydrology indicator. The site's soils are moderately to moderately poorly draining, which indicate the wetland hydrology indicator is absent. One spot that met the wetland hydrology indicator is located immediately west of the interceptor trench, fairly close to the home's northwest corner. The soils were saturated at several inches in depth.
9. Hydric Soils: Because of the decades of sheep and horse use, the site's surface soil horizon has slightly compacted. The wet area identified above did not meet the hydric soils indicator as the soil was 7.5YR 3/2 without mottling. In general, the soils appeared to be a Type C Hydrologic Soil Group, or a till type soil. One location northeast of the barn met the hydric soil indicator with a matrix color of 7.5YR 3/1, but the soil in the upper 12 inches was damp to moist, and certainly not saturated.

## **II. Conclusions:**

1. In several locations, one or two of the three wetland criteria were observed at the same location, but not all three wetland criteria at any one location. As a result, a wetland was not observed onsite.

If you have any questions or concerns, please do not hesitate to email me at [markrigos@hotmail.com](mailto:markrigos@hotmail.com).

Sincerely,



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