



File: 3028
By: Email

June 9, 2014

James Dick Construction Limited
P.O. Box 470
Bolton, Ontario
L7E 5T4

Attention: Greg Sweetnam

Dear: Mr. Sweetnam

Re: Potential Waterfowl Use of Hidden Quarry

It is anticipated that waterfowl will utilize the rehabilitated quarry ponds but not in large numbers. Habitat conditions will generally be unfavourable to heavy waterfowl use of the area, particularly during spring and summer. Habitat features which will discourage waterfowl nesting and feeding include the following.

- There will be 316m of exposed unvegetated cliff face that is unsuitable for waterfowl nesting or feeding.
- After quarry sideslopes are topsoiled and seeded with an upland meadow mix they will be densely reforested. Waterfowl, particularly geese, do not like nesting in treed areas and hence as the trees grow the quality of nesting habitat will decline.
- The grassy reforested sideslopes will not be mowed or fertilized. Geese are attracted to grassy areas that are mowed and fertilized (e.g. golf courses) as these areas provide very nutritious goose pasture.
- Aquatic emergent vegetation will become densely established in shallow shoreline areas adjacent to graded sideslopes and this vegetation will retard the movement of ducklings and goslings from backshore areas to open water. This shoreline vegetation will make waterfowl, particularly young birds, vulnerable to predation.
- The ponds will be about 22m deep and aquatic emergent and submergent vegetation will therefore be limited to the relatively narrow littoral zone where water depths are less than 2m. As a result, there will not be an abundance of food available that is attractive to waterfowl. The wetlands that may develop in the shallow areas will be below the minimum size necessary to support waterfowl broods. Dabbling ducks typically feed in the top 20cm of the water column, so there will be limited areas that are suitable for foraging for them. Most diving ducks can dive to depths of only about 5m, far less than the 22m depth of the quarry ponds, so they will not be able to access food on the ponds' substrate.

Given the above considerations waterfowl nesting and brood rearing in the quarry during the spring and summer months should be minimal. The greatest waterfowl use of the area will likely occur during the fall migration although the number of birds should still be relatively low.

Yours truly,

GWS Ecological & Forestry Services Inc.

A handwritten signature in dark ink, reading "Greg Scheifele". The signature is fluid and cursive, with the first name "Greg" and last name "Scheifele" clearly distinguishable.

Greg W. Scheifele, M. A., R.P.F.
Principal Ecologist/Forester