## Additional Sheet 2020 Annual Report Winkler Light Aggregate Quarry M-1989-065 Schmidt Construction Company Anniversary Date: April 26

**Notes on Reclamation:** Over the past few years the size of the quarry has expanded westward and now eastward. But the size of the floor of the quarry and access routes have limited the ability to reclaim more affected land. Meanwhile a great deal of overburden and topsoil has been gathered and stockpiled around the perimeter of the quarry. With recent shifting of the plant site, about 10 to 15 acres of quarry floor has become available for reclamation on the northern end of the quarry. Also, a similar amount of land has become available on the south side of the quarry. Both of these areas are now outside the stockpile areas and the mine access corridor to the southeast part of the quarry. A good deal of overburden has also been dumped into the westward extension that was mined a couple of years ago. Mining here is not quite finished as a square corner needs to be cut off to produce a more rounded corner. Overburden from this area, which is almost too thick to make mining worthwhile, will be deposited in this westward extension which is now finished with mining to the west. The powerline setback just beyond the west end limits further expansion west in this area. Thus, early work on reclamation will occur here with deposition of overburden, but no shaping is expected to occur until perhaps next year. But this area is getting close to being ready for reclamation.

The areas that will be put into final reclamation, totaling about 20 to 30 acres, are shown on the Main Quarry Map. How much of this will actually be completed is hard to predict at this time because it is not known exactly how much overburden and soil is available in stockpiles. But the reclamation to be done will be controlled mainly by soil depth and not acres reclaimed. Soil depth needs to be a minimum of about 12" to provide enough depth to have a sufficient rooting depth and maintain a sufficient available moisture content to support strong growth. Thus as many acres will be done as can be done while maintaining sufficient soil depth to produce a good growth.

It is also important to note that complete backfilling of the mined out area will generally not be used any longer as was done on the existing reclaimed and released area. That was done that way because there needed to be someplace to put all the overburden and soil that was acquired in the early mining without producing unsightly mounds of material in the landscape. So, other than the two large stockpiles north and south of the office, the removed material was deposited in the mined out area to completely backfill that area. Visual impact is clearly a county concern and having towering stockpiles was contrary to the county's desires.

From now on, the reclamation will be done in accordance with the approved plan. That is, highwalls around the edge of the quarry will be backfilled to a 3:1 slope followed by topsoiling. This will then blend into overburden and soil being placed on the quarry floor to a depth of a foot or more. Although slightly less depth might also work because the pit will hold some water to replenish soil moisture, reliance on that to support the vegetation could result in a revegetation failure if prolonged and severe drought were to occur after establishment. Thus, the emphasis will be on sufficient depth of the growth medium over the number of acres reclaimed given a finite amount of available overburden and soil at any one time.

**County USR Acreage:** The 100 acre limitation in the USR is being approached and this is another factor in doing a good deal of reclamation in 2020. Mining will occur along the eastern margin of the quarry moving northward from the southeast corner where a notch has been mined out. This should provide 1 to 3 years of rock to be mined while the vegetation in reclamation areas is developing. Overburden in this area is thinner than was the case in Phases 1 and II, but there is still plenty of material available to add to the reclamation already planned.

**Pandemic Influences:** The SARS-CoV-2 pandemic and its associated and deadly Covid-19 illness for which there is no cure at present so far, has not had a large impact on the production and sales of rock from this quarry. But it isn't the busy season yet either. However, there is an impact and with so many precautions and limitations imposed on contact between people, construction activity has declined considerably. Also, the economic impact of the pandemic is pretty deep and funds for construction are necessarily limited. As a result mining of new rock has declined somewhat. How long this will last is not known, but it is clear that until there is a vaccine the impact of the pandemic on out customary way of life will likely be severe. Thus, the life of the available reserve contained in the Future Mining zone on the Main Quarry Map is really not predictable. That is why it is placed at 1 to 3 years. It could be even longer. Perhaps by 2021 life will be more normalized, but until then predicting the future is little more than a guess.