

Underhill Gravel Pit Task Force Report September 15, 2011

**Members: Dan Close, Seth Friedman, Michel Morin,
Luana Nedich, David Rogers, Lea VanWinkle and Mike
Weisel**

**The Task Force met bi-weekly from April 14 to
September 15, 2011.**

The Selectboard recommendations to the Task Force were as follows:

The Task: The overall task of this group is to evaluate and determine best options for the town's procurement of sand and gravel. In doing so, the task force will evaluate:

1. The proposed gravel pit area bordered by New Road and Pleasant Valley Road.
2. The feasibility of the town operating a gravel pit at that location or in any other area of the town.
3. The most economical way (distance, vendor, etc) to purchase quality sand and gravel for the town's needs.

WHAT WE KNOW

1. A town owned Gravel Pit is financially worthwhile if the price of the land is reasonable relative to the gravel/sand that is available.
2. Smaller pits that remove hill tops and do not make holes and spread out the environmental impact may be more desirable.
3. With any new land purchase by the Town there is additional liability that might affect the Town.
4. Noise, environmental impacts, loss of property value and “not in my backyard” sentiment for neighbors needs to be considered. There are potential costs to the town of fighting legal action by affected townspeople.
5. The actual operation of a Town Gravel Pit is something the Task Force feels has the potential of being beyond the scope of the Town of Underhill without the proper safeguards and controls. With the implementation of Recommendations such as 5, 6, 10, 11 and 12 in this report, the chances of success are increased.
6. The New Road and Pleasant Valley Road (Albertini) Gravel Pit site has been verbally discussed at a price of \$900,000 (differs from the original Option of \$1,000,000). This site will be referred to in the remainder of the report as the New Road Site.
7. The Town has paid approximately \$4000 for the first of 3 years of taxes on the New Road Site that was a condition of the Option.

8. There will be estimated start-up costs associated with opening a Town pit on the New Road Site:

Entrance road \$125,000*

Clearing phase 1 25,000*

Screening berm and plantings 30,000*

(*these costs assume work done by an outside contractor)

Approximately \$37,000 has already been spent on engineering and legal costs for this site. Permit costs will be incurred but are unknown at this time.

9. Vermont Municipal Bond Bank could issue a 4% bond for \$1.2 million with constant principal and declining interest which would result in a first year payment of \$105,000, declining to \$65,000 in 20 years. See attachment from Vermont Municipal Bond Bank.

10. At the New Road Site 21 relatively shallow test pits were dug with the Town excavator and sieve sample evaluation was performed on material from these pits. The material was excellent gravel based on the sieve tests. The small amount of fine silt and clay material in the sieves suggests that the gravel might be a good candidate for screening winter sand.

11. Based on the geometry of the pit design, it was estimated by Trudell Consulting Engineers that the New Road Site could yield up to 490,000 cubic yards (cy) of material.

12. There are numerous other parcels of land in Underhill with the same soil mapping designations as the New Road Site.

13. Underhill has 38 miles of gravel roads. Gravel roads lose from 1" to 1.5" of gravel annually. This translates into a need for 12,000 cy of gravel per year, town wide, for a loss of 1".

14. At this time, Underhill has identified 7 miles of gravel roads that should be reconstructed. Using a reconstructed gravel depth of 24", each linear foot of road will require 2 cy of gravel. For a half mile of reconstruction per year for 14 years the reconstruction gravel requirement will be 5000 cy per year. See attachment by Mike Weisel for more details.
15. Good gravel can be purchased at Hinesburg Sand and Gravel in Hinesburg, at G.W.Tatro* in Jeffersonville and at Varin's Pit* in Bolton. (*may not quite meet the State spec for road gravel, but will be close)
16. The delivered cost of gravel to Underhill using contracted trucking (not Town trucks) will be:

Hinesburg	\$21/cy
Tatro	\$18.50/cy
Varin	\$17/cy
17. For the total gravel need of 12,000 cy for material loss plus 5,000 cy for reconstruction and using the middle price of \$18.50/cy, the total annual gravel would cost \$314,500 if purchased and delivered by an outside vendor.
18. The Town's present budget (2010-2011) for gravel is \$70,000 and sand is \$45,000.
19. Based on costs of gravel road reconstruction in Jericho in 2008 and 2009 on Skunk Hollow Road, an estimate of the linear foot cost to reconstruct roads in Underhill using an outside contractor is \$65/linear foot, including the gravel.
20. For a yearly half mile, this translates into a total cost of \$171,500, including \$92,500 for the required 5000 cy of gravel (Tatro price of \$18.50/cy delivered).

21. The cost of reconstruction work other than gravel becomes \$79,000 per year ($\$171,000 - \$92,500 = \$79,000$).
22. The former Town Pit on Beartown Road was never properly closed and this is a real concern to Town residents.
23. In order to avoid expensive and burdensome Federal Mining Safety Regulations, any crushing at a Town pit would have to be done totally by an outside contractor.
24. Crushing by an outside contractor of 10,000 cy of material will take from 2-4 weeks.
25. The town of Hinesburg is paying \$4/cy this year to have 12,000cy crushed. They crush every other year.

WHAT WE DO NOT KNOW BUT WISH WE DID

1. Would leasing/owner financing with a payment plan based on the number of cubic yards of material drawn from the pit per annum be a better option? Might the annual lease payment be partially determined by the volume of gravel extracted each year?
2. Without more concrete Town records with financial information about the volume of gravel and sand the town uses and needs, it is hard to calculate the savings or expense to the Town of purchasing the New Road Site at the present Option price.
 - a. How much gravel and winter sand does the Town buy each year?
 - b. What is the volume of gravel and sand used by outside contractors on Town projects?
 - c. How much gravel for annual spreading and/or reconstruction can the Town realistically use each year?
3. With the limitations of the shallow test pits, how much usable material can the New Road Site actually yield?
4. What other parcels in Town might be suitable and available for gravel extraction?
5. What is the true value of the New Road Site?
6. Can the New Road Site be purchased for less money?
7. What safeguards can be implemented to prevent any future Town Pit from becoming another Beartown Road Pit?

RECOMMENDATIONS

1. Townspeople should be kept fully informed on any negotiations and should vote on any further expenditure involving a Town Gravel Pit. This should include additional costs such as taxes incurred for the New Road Site until the Option is exercised, dropped or renegotiated.
2. A tracking system needs to be developed and implemented that accurately tracks actual Town gravel, stone and sand use. An approximate idea of past use will be helpful in putting future use in perspective. Forms (see attachments) can be used for this purpose.
3. We need a future Capital Plan laid out in terms of a road repair/rebuilding strategy.
 - a. In discussions, which should include the Town Road Foreman, the realistic volume of gravel that the Town road crew can handle in a construction season for spreading on roads to combat annual loss should be determined.
 - b. Consider whether or not it is recommended to continue rebuilding roads with Town forces or if it makes more sense to contract this out. Rebuilding responsibilities will necessarily reduce the effort that the Town crew can devote to ditching, brush cutting, road gravelling, etc.
4. Other potential sites for gravel/sand should be considered.
 - a. The Selectboard could personally contact and actively pursue the list of landowners with

potential gravel/sand which the committee has submitted to them using the soil maps.

- b. A notice could to be posted on the Town website and in the Mountain Gazette that the Town of Underhill is looking for potential gravel pit sites in Underhill or surrounding communities to purchase land or lease gravel/sand rights. A mass mailing could also be considered.
 - c. A financial analysis should be drawn up to determine the financial effects on the Town.
5. Even if a potential site does not require an Act 250 permit, the Town should include the Act 250 safeguards and standards for development, management and engineering.
6. Any Town pit development proposal should be discussed with the affected neighbors as early in the process as possible.
7. Re-negotiate the existing Option for the proposed New Road Gravel Pit.
 - a. There is a cost of approximately \$4000/year to pay for taxes for the final 2 years of holding the Option open. Move with Due Diligence.
 - b. Fair market value of the raw land needs to be determined by a commercial Real Estate Appraiser.
 - c. Option re-negotiation could be done by a qualified negotiating committee.
8. If the New Road Site is to be pursued the following requirements are suggested.

- a. 10-20 more core samples need to be taken that include several drillings down to the lowest pit level, since the previous samples are not enough to determine the volume of gravel. Hollow stem augers would cost around \$15,000. This cost should be paid by the landowners or shared with the Town.
 - b. All major site development should be subcontracted.
 - c. Evaluation of the effect on neighbors of both noise and environmental impact, including diesel particulate emissions from off road vehicles in the pit and impact on wildlife should be undertaken. Give serious consideration to minimize landowner's impacts to ease noise with off season crushing, berms and large buffer zones. Some of this will be evaluated with the Act 250.
 - d. The Town should obtain estimates of construction of roads, berms, and all other up-front costs including permits PRIOR to any purchase or lease.
 - e. A revised financial analysis, reflecting a new lease or purchase agreement, should be drawn up to determine the financial effects on the Town of a new agreement (Due Diligence).
9. A clear closure plan for the Beartown Gravel Pit should be prepared and implemented with or without a new Town gravel pit.
 10. Any pit products should be for the Town use only with nothing being sold.
 11. Any new gravel pit would need a very clear closure plan and estimated costs of closure.

12. For any gravel pit an oversight committee for management should be appointed that might consist of 5 people (1 Selectboard member, Highway Foreman, 1 gravel pit neighbor, and 2 townspeople at large).
13. There should be outside oversight of pit operations. There should be periodic review by the design engineer.
14. The overall Underhill Town Plan should be considered when pursuing any gravel pit. (i.e. 1.17, 8.2, etc)
15. A "compromise solution" is a scenario that the Selectboard may want to consider. Here is a hypothetical scenario: A landowner has a 20-acre parcel that has development potential and soil conditions that represent gravel. The Town absorbs a portion of the cost of the development (land clearing and the access road). In exchange the Town would take enough gravel to offset the costs of development and operations. Any future removal of gravel would be paid for by the Town at a predetermined per yard fee that is paid to the landowner. This relationship exists for 2 to 4 years and afterward the landowner has buildable lots to sell and profit from.

This solution has the potential for a "win win" for all parties involved. The landowner makes money, the housing lots are not in a hole, the Town avoids owning land, the Town gets local gravel, and no particular neighborhood is saddled with the environmental impacts of a long-term pit. Since this is a "win, win" no one completely wins and no one completely loses. Yes, it is complicated, yes the gravel may not be as cheap, yes the neighbors will have some noisy years, but this is the nature of compromise.