

Mike Harris - Notes from Closing Verbal Submission

Height and Set-back of OBDA adjacent to Stream Diversion

- The alignment of the diversion channel is shown in Tonkin and Taylor Figure E3 of Cameron Lines evidence. The surface of the overburden disposal area immediately to the south of the diversion channel (the area of concern to a submitter) is flat lying with only minimal relief for surface drainage. The overburden surface then rises to the south and southwest.
- This landform is shown in more detail in Boffa Miskell Figure 12 and 13 (section 6).
- The overburden disposal area forms the alignment of the diversion channel (no setback).

Alternative Use of Greensand

- Alternative use of the greensand as a fertilizer / soil conditioner has been investigated by Winstones previously.
- It was investigated by John Carlson in the 1970's with samples taken for chemical analysis.
- More recently, Alan Happy undertook a review of all overburden material including the use of greensand as a fertilizer / soil conditioner.
- In both reviews, it was found that the greensand was not suitable for use as fertilizer / soil conditioner.

Alternative Processing of Overburden

- Pages 137/138 of Andrew Norman's submitters' response contains a letter from CDE Global (supplier of processing equipment for sand and aggregates amongst others) detailing equipment which may be used to process overburden material into marketable products.
- The assumption made by the supplier to produce a marketable product was that the overburden contained 40 percent aggregate (+6.7mm material), 40 percent sand, and 20 percent clay/silt.
- Greensand, which makes up 70 percent of the overburden does not contain aggregate, and the sand not suitable as a marketable sand product (glaucanitic sand).
- The processing of greensand into marketable products (as outlined in the CDE Global letter) is not a realistic proposal.

Vehicle Movements

- On page 20 of Andrew Norman submitters' response it is calculated that there will be 38,000 return vehicle trips in the first two enabling works seasons, and then 38,000 return vehicle trips every three years for the next 35 years for the general works.
- At 16 tip per hour, 9.5 working hours per day (53.5 hour week) for 32 weeks, equates to 27,392 return trips. With each tip in this scenario being 55 cubic metres, this equates to 1.5 million cubic metres of material being placed in 32 weeks.
- However, 16 tips per hour will not occur every hour, each day, or every week as a result of the contractor's utilisation of working hours, start-ups and close-downs, equipment and operator availability, weather conditions, ground conditions etc.
- The actual number of return trips will be enough to move the contracted volume of material in an earthworks campaign. For example, 300,000 cubic metres of material using 100 tonne dump trucks (55 cubic metres) will result in approximately 5500 return trips.

Comparison with Yaldhurst Quarries

- Comparison has been made with Yaldhurst in Canterbury with regard to dust.
- The Yaldhurst Quarries are a number of sand and gravel pits operated by several operators over an area of 200 hectares with numerous aggregate processing plant (both fixed and mobile) with associated stockpiling and loadout.
- Overburden placement is not an activity undertaken to any significant degree what so ever at the Yaldhurst Quarries.