

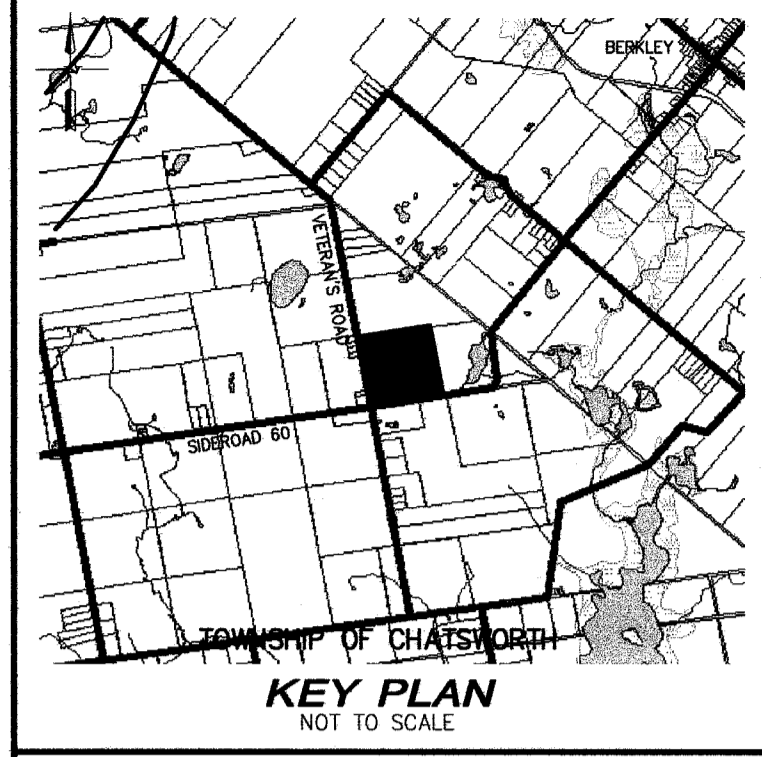
LEGEND

- EXISTING FENCE LINE
- - - 120m BOUNDARY LIMIT
- - - BOUNDARY OF AREA TO BE LICENCED
- - - LIMIT OF EXTRACTION
- - - 300m PROCESSING SETBACK
- - - BOTTOM OF SLOPE
- ⊕ TH/BH TESTHOLE OR BOREHOLE LOCATION
- ⊕ MW MONITORING WELL LOCATION
- ⊕ EXISTING SPOT ELEVATION
- ⊕ PROPOSED EXCAVATION LIMIT ELEVATION
- ⊕ LIMIT OF TREE COVER
- ⊕ CURRENT ZONING
- ⊕ CURRENT LAND USE
- ⊕ PRIVATE SUPPLY WELL (APPROXIMATE LOCATION)

A1, RUI
AGRICULTURAL, RURAL

NOTES

1. This site plan is prepared under the Aggregate Resources Act for a Class A licence, Category 1.
2. Topographical information based on field investigation by Gamsby & Mannerow Limited and Ontario Base Mapping.
3. Area to be licenced: 39.6 ha.
4. Area to be extracted: 18.92 ha.
5. The "high" groundwater elevation descends from 400.0 metres in the westerly portion of the site to 398.0 metres in the easterly portion of the site, as recorded May, 2013.
6. No water diversion or extraction below the water table is proposed. The maximum depth of extraction will occur within 1.5m of the water table. The maximum depth of extraction is to be from 400.0 to 398.0 metres ASL, with requirements and limitations per notes 18 and 22.
7. Surface water drainage will be by percolation or evaporation.
8. Equipment to be used on-site for daily operations may include: hydraulic excavators, dozers, loaders, skid steers, grader, crusher, screener, saws, generators, air compressors, pumps and trucks.
9. Fuel storage tanks shall be installed and monitored in accordance with the Liquid Fuels Handling Code under the Technical Standards & Safety Act. Fuel storage tanks shall not be located on bottom of pit floor.
10. Internal haul road shall be located on pit floor as required, as operations progress.
11. No additional tree screening is proposed.
12. Wire fence complete with signage shall be erected around the perimeter of the licenced area/limit of extraction prior to extraction.
13. Pit operations shall be limited to the hours of 7:00 am to 7:00 pm, Monday to Friday and 9:00 am to 2:00 pm, Saturday with no Sunday operations.
14. Any wood of value taken during clearing operations shall be used as fire wood. Other wood and stumps shall be chipped and used in the rehabilitation of the site or disposed of off-site in accordance with applicable MOE guidelines.
15. Topsoil and Overburden:
 - Topsoil must be stripped sequentially prior to pit extraction.
 - All trees within 5 metres of the limits of extraction must be removed.
 - All topsoil or overburden stripped during operations shall be stockpiled separately on-site with stable vegetated side slopes.
16. Stockpile Handling:
 - The topsoil and overburden from Phase 1 shall be placed in stockpiles away from the limits of extraction and later relocated to the pit floor of Phase 1 when sufficient extraction has taken place.
 - Phase 1 extraction shall proceed from the east limit of extraction to the west. As Phase 1 nears completion, stripping of topsoil and overburden in Phase 2 may commence.
 - Topsoil and overburden stripped from Phase 2 shall be placed in stockpiles in a suitable location or used for rehabilitation of Phase 1.
 - As Phase 2 nears completion, stripping of topsoil and overburden in Phase 3 may commence.
 - Topsoil and overburden stripped from Phase 3 shall be placed in stockpiles in a suitable location or used for the rehabilitation of Phases 1 & 2.
17. The maximum tonnage to be extracted in any year is 150,000 tonnes.
18. Any standing water shall be noted and recorded on a weekly basis during pit operations. These inspection reports are to be compiled and provided with the Annual Compliance Assessment Report for submission to the MNR and Clerk of the upper and lower tier municipalities.
19. Prior to extraction within each phase, the limit of extraction is to be clearly staked/demarcated. Setbacks are to be clearly staked and visible at all times.
20. Dust is to be mitigated on-site.
21. The construction of one (1) storage/operations building is proposed in the location shown.
22. A spills contingency program shall be developed prior to site preparation.
23. Hydrogeological Study Notes:
 - Refueling and maintenance of machinery (if any) shall not be conducted in areas of the excavation which are within 1.5 metres of the water table, i.e. where excavations are completed to the water table.
 - Excavation and/or the operation of vehicles shall not be conducted in areas of standing or ponded water.
 - Excavation shall not proceed past depth where water enters the excavation. Once water enters an excavated area, the water level elevation shall be noted and adjacent excavations stopped approximately 0.3 metres above the water level elevation.
 - No chemical spraying (pesticide/herbicide) shall be conducted within areas of excavation.
 - An access/egress route shall be maintained a minimum of 1 metre above the maximum proposed depth in the excavation areas to prevent vehicle operation in standing water.
 - Areas shall maintain vegetative cover as long as possible prior to excavation.
 - No dewatering or redirection of surface water outside the limit of excavation shall be conducted to augment aggregate extraction.
 - During operations, areas of standing water shall be noted and recorded on a weekly basis. Where areas of standing water are noted to remain for a period greater than 1 month during operations and are associated with the groundwater elevation (as opposed to surface ponding), remediation by filling with suitable material shall be conducted.
24. No processing equipment shall be operated within 300 metres of a sensitive receptor.
25. Environmental Compliance approvals shall be obtained for processing equipment prior to assembly and/or operation, as required.
26. Extraction is to be completed in one lift. Face heights are to meet Ministry of Labour regulations.
27. NTR Mitigation Measures:
 - The only additional limit of extraction setbacks recommended for this pit operation beyond that of standard setbacks for the ARA include 20 metre setbacks from polygon 6. This setback is to be measured from the drip line of the trees. For the purposes of the NTR the MNR operational setback requirements are considered sufficient for all other setbacks.
 - No water diversion is anticipated and any perched water intersected during excavation will be controlled by localized ditching and discharge to lower elevations where it will be infiltrated into the subsurface.
 - No surface waters are to be discharged from the proposed pit site. Precipitation shall be allowed to naturally percolate into the native soil substrate.
 - Topsoil and subsoil will be stripped and placed separately wherever there are distinguishable layers and sufficient thickness to allow separate handling. Topsoil and overburden will remain on site.
 - Overburden and topsoil not required for immediate use in progressive rehabilitation of this site may be temporarily at grade or on the active pit floor. Any stockpile to be stored for longer than one (1) year will be vegetated to control erosion.
 - No scrap will be stored on site.
 - All equipment storage will be contained within the licenced pit area.
28. Archeological Assessment Notes:
 - Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the Ontario Heritage Act. The proposed pit operation discovering the archaeological resources must cease alteration of the site immediately and engage a licenced consultant archaeologist to carry out archaeological fieldwork in compliance with Section 48(1) of the Ontario Heritage Act.
 - The Cemeteries Act, R.S.O. 1990 c.4 and the Funeral, Burial and Cremation Services Act, 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries and the Ministry of Consumer Services.



KEY PLAN
NOT TO SCALE

NOTES :

APPLICANT:
PEARL & BRIAN BUMSTEAD
584015 - 60 SIDEROAD
RR 2 HOLLAND CENTRE, ONTARIO
N0H 1R0

Pearl Bumstead
APPLICANT'S SIGNATURE

Brian Bumstead
APPLICANT'S SIGNATURE

November 11 2013
DATE

THE POSITION OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM.



1	NOV 8/13	PER MNR COMMENTS DATED OCT 23/13	M.D.N.
NO.	DATE	REVISION DESCRIPTION	CHKD

Gamsby and Mannerow ENGINEERS

BUMSTEAD PIT

PART LOT 27, CONCESSION 7

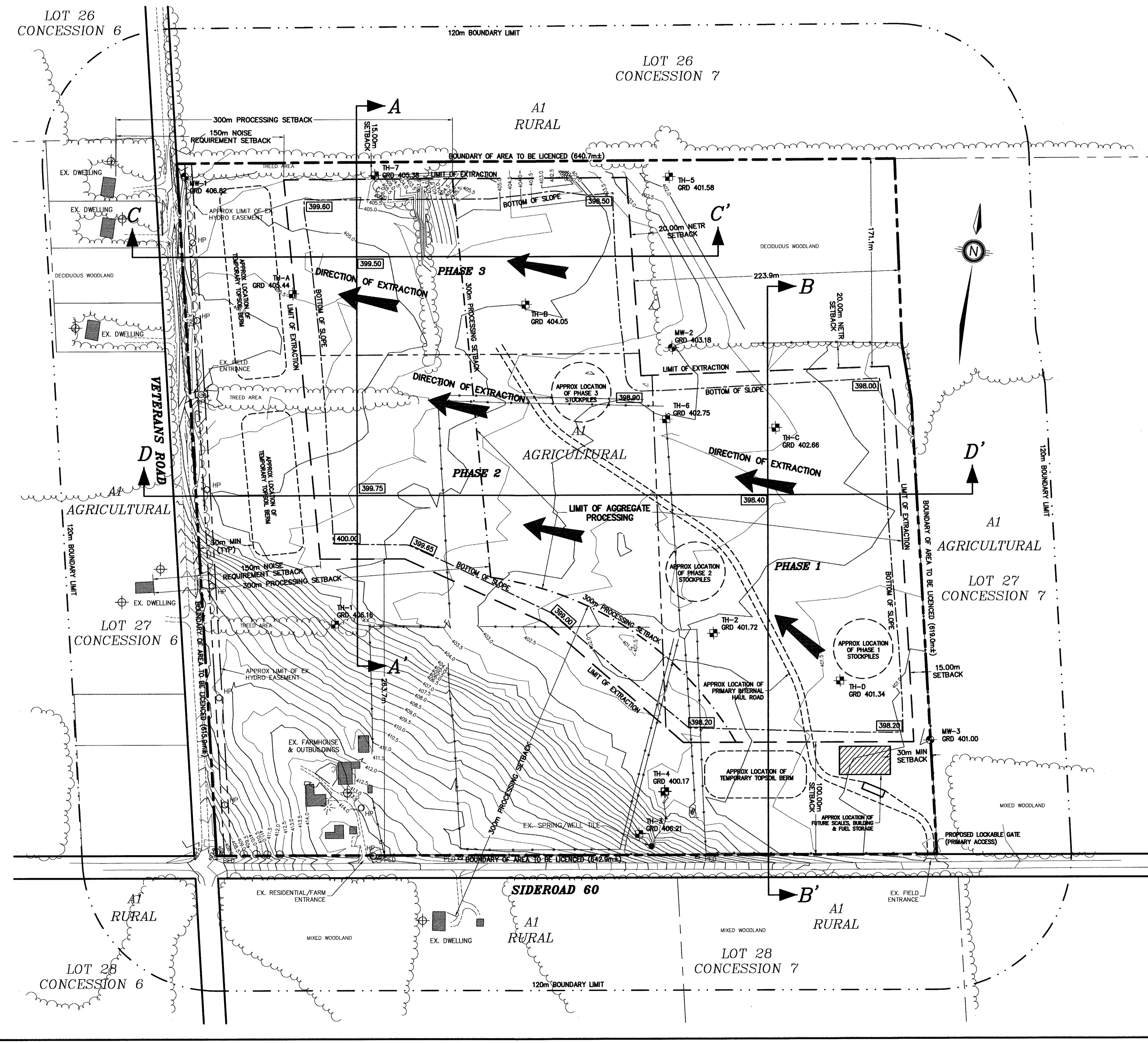
FORMER TOWNSHIP OF HOLLAND

TOWNSHIP OF CHATSWORTH

COUNTY OF GREY

DRAWN BY:	APPROVED BY:	PROJECT NO.:	DRAWING NO.:
E.J.T.	M.D.N.	210099	2/4
DESIGNED BY:	DATE:	SCALE:	
M.D.N.	SEP 9/13	1:2,000	

Plotted On: NOVEMBER 8, 2013 210099spe2.DWG



OPERATIONAL PLAN

