BRANDENBARK™ - CONSTRUCTION OVERVIEW 2 INCH GAP BETWEEN THE BOTTOM OF THE BARK AND THE POLE UTILITY POLE ---(25' LENGTH X 1' WIDTH) PREDATOR GUARD ——— (DISC) PREDATOR GUARD ----(SHEET METAL BAND)

- BOTTOM 5' OF POLE TREATED

SONOTUBE AND CONCRETE

Replacement Roosting Structures will be constructed to accommodate roosting bats to mitigate for impacts to cavity trees providing potential SAR bat roosting habitat.

- 1. Replacement Roosting Structures shall be constructed as shown on the drawing using Brandenbark™ or an equivalent artificial bat bark.
- 2. Brandenbark™ is available for purchase at Copperhead Environmental Consulting, 11641 Richmond Road P.O. Box 73, Paint Lick, Kentucky 40461. Contact: Office No. (859) 925-9012 or by email at information@copperheadconsulting.com 3. The artificial bat bark shall be wrapped tightly around the top of the utility pole, and shall be positioned flat against the pole and secured around the top with screws and washers to mitigate water seepage between the bark and pole. The bark should flare out gently towards the bottom to create a 2" gap between the bottom of the bat bark and the pole for bat access. The bat bark is shaped (51" high, 38" wide at the top and 44" wide at the bottom) so that it naturally bells around
- 4. Additional installation instructions may be avilable from copperhead consulting inc. 5. Construction methodologies outlined within this document may be refined at the construction stage to ensure structures provide optimal roosting habitat for SAR bats, are safe and structurally sound, and that structures are built to withstand all
- weather conditions (i.e., excessive rainfall and/or snowfall, extreme wind conditions, etc.).
- 6. Site shall be cleaned up and all waste materials removed. replacement structure Construction Notes:
- 1. Structure dimensions shall be as shown on the drawing.
- 2. the utility pole to be used will be pressure—treated only at the base or the bottom 1.5 m (5 feet), the depth that will be set into the ground, to prevent rot. all materials are to be arsenic free.
- 3. The top of the utility pole shall be painted/sprayed with Rhino Liner or an equivalent product that will create a protective layer across the top of the pole.
- 4. Brandenbark™ or an equivalent artificial bat bark shall be wrapped around the upper portion of the utility pole and affixed using suitable screws and washers around the top of the sheet. 5. all Screws and washers used shall be exterior grade (e.g., galvanized, coated, stainless, etc.).
- 6. screws and washers shall be used along the side seams of the artificial bat bark to secure the bark to the pole.
- 7. at the bottom of the bat bark a single screw and washer shall be used to secure the side seams, leaving the bottom of the bark with a 2" gap between the bark and the pole for bat access. as noted above, the bark is shaped so that it naturally
- 8. material such as aluminum flashing or similar material shall be used to create a cover or roof over the top of the utility pole. the cover shall be arched over the top of the utility pole and affixed along the sides of the pole as shown on the
- 9. Dig/auger a suitable sized hole to fit the utility pole into the earth to a depth of 1.5 m (5 feet).
- 10. A concrete pad may be needed to create a base at the bottom of the hole on which the pole will sit (to be determined by contractor).
- 11. Pole should be installed to be true vertical.

the pole when installed.

- 12. backfill the hole with gravel materials, and continuously pack down to firm the backfilled material around the pole. the gravel will help to drain water away from the pole.
- 13. Metal predator guards shall be installed around the pole. predator guards are to be 24 gauge galvanized steel sheets wrapped around the pole. guards are to be mounted 1.0 m (3 feet) above grade and are to be 1.2 m high. guards are to be securely fastened to the pole with galvanized steel screws (flush with the guard). replacement structure location:

1. replacement structures shall be installed in the locations shown on the accompanying landscape plan drawing.

- 2. location of replacement structures may be refined on—site at the time of construction in consultation with the regulatory agencies and an ecologist who is experienced in habitat requirements for sar bats. 3. If a Replacement Roosting Structure is positioned next to an existing tree line, it should be placed 3.0 m (10 feet) from the closest tree branch, or wires or other potential perches that can be used by aerial predators.
- 4. Vegetation within the 3.0 m (10 feet) radius is to be removed, except trees with minimum diameter at breast height of 10 cm.





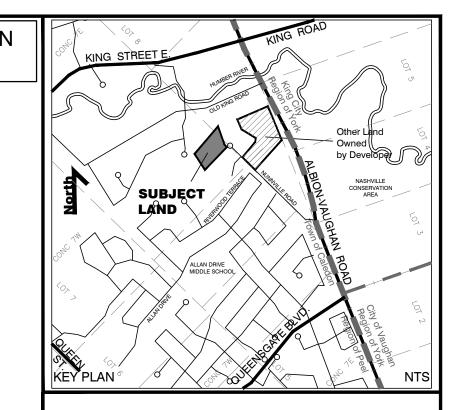
BRANDENBARK BAT HABITAT STRUCTURE

300 (1')

GROUND ———

SCALE: N.T.S.

NOT FOR CONSTRUCTION SPA ONLY



TOWN OF CALEDON PLANNING RECEIVED Dec 22, 2023

ISSUED FOR 3rd SPA	18DEC2023	
ISSUED FOR DART	20NOV2023	
ISSUED FOR PRE-CONSULTATION (DART)	25APRIL2023	
ISSUED FOR SECOND ENGINEERING SUBMISSION	9MAR2023	
ISSUED FOR FIRST ENGINEERING SUBMISSION	28NOV2022	
REVISIONS TO DRAWING	DATE	

ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED

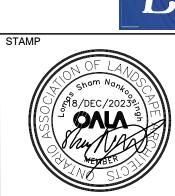
NUNNVILLE RESIDENTIAL DEVELOPMENT

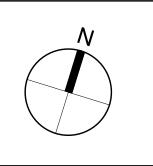
MUNICIPALITY

TOWN OF CALEDON

PROJECT ADDRESS 13290 NUNNVILLE ROAD, CALEDON

LANDSCPE NOTES AND DETAILS





PROJECT NUMBER 15 MAR 2022 LSN DWG. NUMBER