Frederick County Forest Conservation Worksheet (Version 4.0)

Notes: 1. Use **0.00 acres** for all negative numbers that result from the calculations.
2. Carry all calculations to the nearest **.01 acre*.** (Field measurements may be to the nearest **.1 acre,** but shall be expressed to the nearest **.01 acres.** Example: 43.2 acres of existing forest shall be expressed as **43.20 acres.**)
3. For Afforestation and Conservation Threshold values see 1-21-41 of the FRO

Net Tract Area:

A. *Total *(Gross) Tract Area* — A =
B. *Deductions* (Critical Area, *100 yr. floodplain, Road dedication for existing roads and easements) — B =
I.d. deductions here:
C. *Net Tract Area* Net Tract Area = Total Tract (A) - Deductions (B) — C =

Land Use Category:

D. *Afforestation Threshold* (Net Tract Area [C] x _____%) *For all development projects in Frederick Co. — D =

E. *Conservation Threshold* (Net Tract Area [C] x _____ %) Use *Standard Method % values.
(Standard Method % values are those established by the Maryland State Forest Conservation Act of 1991) — E =

Existing Forest Cover:

F. *Existing Forest Cover <u>within</u> the Net Tract Area* — F =

G. *Area of Forest Above Conservation Threshold* If the Existing Forest Cover (F) is greater than the Conservation Threshold (E), then G = F - E; Otherwise G = 0.00 — G =

Breakeven Point:

H. *Breakeven Point* (Amount of forest that must be retained so that no mitigation is required)
(1) If the Area of Forest Above the Conservation Threshold (G) is <u>greater than</u> 0.00, then H = [0.2 x the Area of Forest Above Conservation Threshold (G)] + the Conservation Threshold (E); — H =
(2) If the Area of Forest Above the Conservation Threshold (G) is equal to 0.00, then H = Existing Forest Cover (F).
I. *Forest Clearing Permitted Without Mitigation* I = Existing Forest Cover (F) - Breakeven Point (H) — I =

Proposed Forest Clearing & Retention:

J. *Total Area of Forest to be Cleared* *(*<u>All forest area not protected by easement</u>*)* — J =
K. *Total Area of Forest to be Retained* K = Existing Forest Cover (F) - Forest to be Cleared (J) *(All K must be in a protective FRO easement.)* — K =

Planting Calculations: If the Total Area of Forest to be *Retained (K) is <u>at or above</u> the Breakeven Point (H), no planting is required, and no further calculations are necessary (L=0.00 acres, M=0.00 acres, N=0.00 acres and P=0.00 acres); Otherwise, calculate the planting requirement(s) as follows:

L. *Reforestation for Clearing Above the Conservation Threshold*
(1) If the Total Area of Forest to be Retained (K) is <u>greater than</u> the Conservation Threshold (E), then L = the Area of Forest to be Cleared (J) x 0.25; — L =
(2) If the Forest to be Retained (K) is <u>less than or equal to</u> the Conservation Threshold (E), then L = Area of Forest Above Conservation Threshold (G) x 0.25
M. *Reforestation for Clearing Below the Conservation Threshold*
(1) If Existing Forest Cover (F) is <u>greater than</u> the Conservation Threshold (E) and the Forest to be Retained (K) is <u>less than</u> or equal to the Conservation Threshold (E), then M = 2.0 x [Conservation Threshold (E) - Forest to be Retained (K)] — M =
(2) If Existing Forest Cover (F) is <u>less than or equal to</u> the Conservation Threshold (E), then M = 2.0 x Forest to be Cleared (J).
N. *Credit for Retention Above the Conservation Threshold* If the area of Forest to be Retained (K) is <u>greater than</u> the Conservation Threshold (E), then N = Total Area of Forest to be Retained (K) – Existing Forest Cover (E) — N =

Planting Requirements:

P. *Total Reforestation Required* P = L + M – N — P =

Q. *Total* Afforestation *Required* If Existing Forest Cover (F) is less than the Afforestation Threshold (D), then Q = Afforestation Threshold (D) - Existing Forest Cover (F) — Q =
R. *Total Forestation Requirement* R = P + Q — R=

Miscellaneous Credits: These credits are allowed as per the criteria and limitations listed in § 1-21-44 MISCELLANEOUS CREDITS of the FRO.
S1. *Street Tree/Landscape* S1 = ¼ [Canopy area of each planted tree + planted shrub coverage], where a standard street/landscape tree is measured @ 30' mature diameter — S1=
S2. "*Tree Save" Credits"* S2 = ¼ [Canopy area of existing trees and non-priority forest saved during construction, but not protected by easement] — S2=
S3. *SWM and Rain Gardens* S3 = 20-yr. growth canopy-area of SWM Facilities and Rain Gardens — S3=
S4. *Total Miscellaneous Credits* S4 = S1 + S2 + S3; (Total (S4) may not exceed 25% of Total Reforestation Requirement (R)). — S4 =

***Mitigation Summary:**

T. *Area of Existing Forest under Easement* T = Total Area of Forest to be Retained (K) — T =
U. *Area of Planted Forest (Forestation) under Easement* (Total acres to be planted in forest) — U =
V. Total Miscellaneous Credits (S4) — V =
W. Total on-site mitigation (W= T + U + V) — W =
X. Balance of mitigation owed (X= R – U- V) — X =
Y. Method of providing balance of mitigation owed:
1. <u>Transfer of Forest Banking Credit</u> (new forest credit @1:1 ratio OR existing forest credit @ 2:1 ratio): — Y1=
2. <u>Payment of fee-in-lieu</u> ($0.54 per sq. ft. for property outside priority funding areas, $0.432 per sq. ft. for property within priority funding areas) — Y2=
3. <u>Off-site easement provided</u> (new forest credit @1:1 ratio OR existing forest credit @ 2:1 ratio): — Y3=
Z. Total Mitigation Provided (Z= W + Y) (for Y2, use <u>acres</u> of mitigation provided via fee): — Z=