MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
APPROVED - 420240750
Joshua Penn
12/08/23

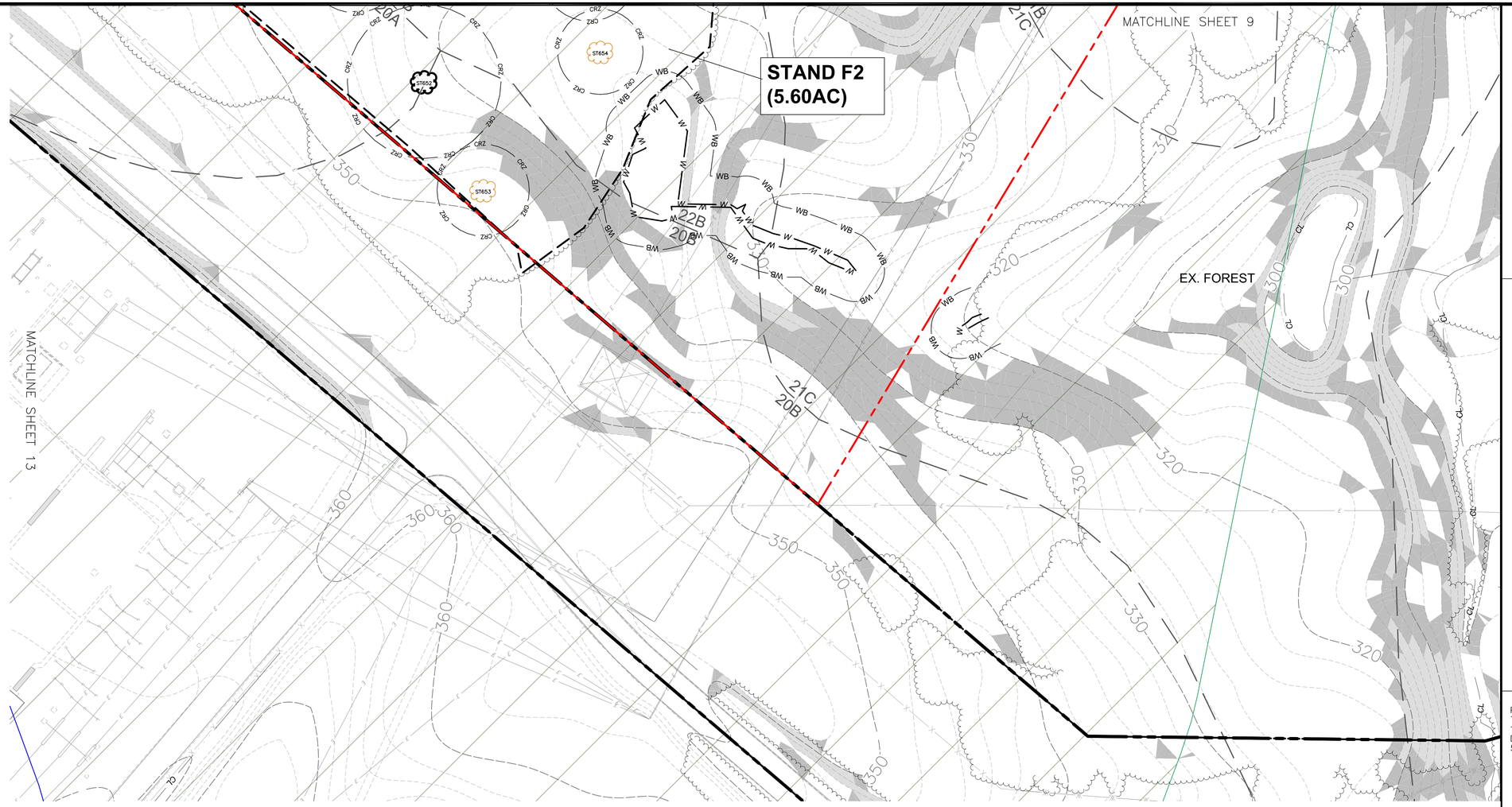
PLANNING DEPARTMENT USE ONLY (E-PLANS)

LEGEND

- NRI/FSD STUDY AREA
- TOTAL TRACT AREA
- EXISTING TREELINE
- SOILS BOUNDARY (CnC / CnD)
- WATERSHED BOUNDARY (MONOCACY RIVER WATERSHED / POTOMAC RIVER WATERSHED)
- STEEP SLOPES 15–25%
- STEEP SLOPES 25% OR GREATER
- SENSITIVE SPECIES PROJECT REVIEW AREA
- HISTORICAL RESOURCE
- EXISTING PERENNIAL STREAM
- EXISTING INTERMITTENT STREAM
- APPROXIMATE OFF–SITE STREAM CENTERLINE (CL)
- EXISTING NON–TIDAL WETLAND (W)
- 25' WETLAND BUFFER (WB)
- STREAM VALLEY BUFFER (SVB)
- FEMA 100–YEAR FLOODPLAIN (FP)
- FOREST STAND BOUNDARY
- 1 — APPROX FOREST STAND DATA POINT LOCATION
- SPECIMEN TREE LOCATION WITH CRITICAL ROOT ZONE (#1, CRZ)
- SIGNIFICANT TREE LOCATION WITH CRITICAL ROOT ZONE (#1, CRZ)

NOTE: THE NRI/FSD IS ONLY VALID FOR AREAS WITHIN THE STUDY AREA BOUNDARY. ANY DISTURBANCE OUTSIDE THIS AREA WILL REQUIRE A NEW NRI/FSD

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.



STAND DESCRIPTIONS

The forest stand delineation field study revealed that the existing forest is comprised of twelve (12) separate stands based on age and/or species composition.

STAND A

Stand A (42.60 acres) is a mature, mixed-hardwood forest dominated by tulip poplar *(Liriodendron tulipifera)*, American sycamore *(Platanus occidentalis)*, northern red oak (*Quercus rubra*), hickory (*Carya sp.*) and slippery elm *(Ulmus rubra)*. The understory contains spicebush (*Lindera benzoin*) and American pawpaw (*Asimina triloba*), while the herbaceous layer is generally comprised of wineberry (*Rubus phoenicolasius*), stilt grass (*Microstegium vimineum*), white snakeroot (*Ageratina altissima*), and wavyleaf basketgrass (*Oplismenus undulatifolius)*. This stand, which has an average DBH of 14 inches, contains two hundred twenty-eight (228) significant trees and one hundred twenty-nine (129) specimen trees. The Forest Structure Analysis Sheet (Exhibit 6) indicates that this stand has a structure value of 16, which places it in the lower end of the "Priority" rating. Stand A did not exhibit any evidence of disease or insect infestation and contains a moderate percentage of invasive species cover. Due to the presence of significant environmental features (i.e. specimen trees, wetlands, 25-foot wetland buffers), the age of the stand, and the relatively high stand structure value, Stand A should be classified as a Priority 1 Forest Retention Area.

STAND B

Stand B (3.44 acres) is a mature, mixed-hardwood forest dominated by American elm *(Ulmus americana)*, silver maple *(Acer saccharinum)*, northern red oak, and black walnut *(Juglans nigra)*. The understory contains American elm and American pawpaw, while the herbaceous layer is dominated by wineberry, Japanese honeysuckle (*Lonicera japonica*), wavyleaf basketgrass, American paw paw, box elder (*Acer negundo*), red maple (Acer rubrum), and white snakeroot. This stand, which has an average DBH of 17 inches, contains thirteen (13) significant and seven (7) specimen trees. The Forest Structure Analysis Sheet (Exhibit 7) indicates that this stand has a structure value of 12, which places it in the "Good" rating. Stand B did not exhibit any evidence of disease or insect infestation, and it contained a relatively low percentage of invasive species cover. Due to the presence of significant environmental features (i.e. specimen trees, steep slopes), Stand B should be classified as a Priority 1 Forest Retention Area.

STAND C

Stand C (3.19 acres) is a mid-successional, mixed-hardwood forest dominated by box elder, American sycamore, and American elm. The understory contains box elder, American paw paw, American elm, and northern spicebush, while the herbaceous layer is dominated by invasives such as Japanese stiltgrass, wineberry, and Japanese honeysuckle, as well native species including box elder and black gum (*Nyssa sylvatica*). This stand, which has an average DBH of 12 inches, contains five (5) significant and eight (8) specimen trees. The Forest Structure Analysis Sheet (Exhibit 8) indicates that this stand has a structure value of 15, which places it in the lower end of the "Priority" rating. Stand C did not exhibit any evidence of disease or insect infestation and contained a relatively low percentage of invasive species cover. Due to the presence of significant environmental features (i.e. specimen trees, wetlands, 25-foot wetland buffers), Stand C should be classified as a Priority 1 Forest Retention Area.

STAND D

Stand D (1.04 acres) is a mid-successional, mixed-hardwood forest that is dominated by red maple. The understory contains American pawpaw, elm (*Ulmus sp.*) and sassafras (*Sassafras albidum*), while the herbaceous layer is comprised of white snakeroot, Japanese stiltgrass, Japanese barberry *(Berberis thunbergia)* and wineberry. This stand, which has an average DBH of 12 inches, contains two (2) significant and one (1) specimen tree. The Forest Structure Analysis Sheet (Exhibit 9) indicates that this stand has a structure value of 12, which places it in the "Good" rating. Stand D did not exhibit any evidence of disease or insect infestation and contained a moderate percentage of invasive species cover. Due to the presence of significant environmental features (i.e. specimen trees, steep slopes, 25-foot wetland buffers), Stand D should be classified as a Priority 1 Forest Retention Area.

STAND E

Stand E (4.80 acres) is an early-successional, mixed-hardwood forest dominated by black locust *(Robinia pseudoacacia)*. The understory contains black locust and eastern red cedar (*Juniperus virginiana*), while the herbaceous layer is comprised of white snakeroot, Japanese stiltgrass, and Virginia creeper (*Parthenocissus quinquefolia)*. This stand, which has an average DBH of 8 inches, contains no significant or specimen trees. The Forest Structure Analysis Sheet (Exhibit 10) indicates that this stand has a structure value of 14, which places it in the upper end of the "Good" rating. Stand E did not exhibit any evidence of disease or insect infestation but contained a high percentage of invasive species cover. Due to the general lack of significant environmental features and the high percentage of invasive species cover, Stand E should be classified as a Priority 3 Forest Retention Area.

STAND F

Stand F (13.15 acres) is a mature, mixed-hardwood forest dominated by tulip poplar and box elder. The understory contains American paw paw and box elder, while the relatively dense herbaceous layer is dominated by American paw paw, Japanese stiltgrass, white snakeroot, and autumn olive (*Elaeagnus umbellate*). This stand, which has an average DBH of 16 inches, contains thirty-six (36) significant trees and sixteen (16) specimen trees. The Forest Structure Analysis Sheet (Exhibit 11) indicates that this stand has a structure value of 16, which places it in the lower end of the "Priority" rating. Stand I did not exhibit any evidence of disease or insect infestation and contained a very high percentage of invasive species cover. Due to the presence of significant environmental features (i.e. specimen trees), Stand A should be classified as a Priority 1 Forest Retention Area.

STAND G

Stand G (4.23 acres) is an early-successional, coniferous forest dominated by Virginia pine *(Pinus virginiana)* and eastern red cedar. The understory contains Virginia pine, autumn olive and eastern red cedar, while the herbaceous layer is dominated by Japanese stiltgrass, white snakeroot, and invasive grape *(Vitis sp.)* This stand, which has an average DBH of 8 inches, contains three (3) significant trees and no specimen trees. The Forest Structure Analysis Sheet (Exhibit 12) indicates that this stand has a structure value of 8, which places it in the lower end of the "Good" rating. Stand G did not exhibit any evidence of disease or insect infestation and contained a moderate percentage of invasive species cover. Due to the lack of significant environmental features (i.e. specimen trees), Stand G should be classified as a Priority 3 Forest Retention Area.

STAND H

Stand H (5.81) acres), which is comprised of two substands, is characterized as a mid-successional, mixed-hardwood forest with a canopy comprised of tulip poplar *(Liriodendron tulipifera)* and slippery elm *(Ulmus rubra)*. The understory contains autumn olive, slippery elm (*Ulmus rubra*), and box elder, while the herbaceous layer is dominated by Poison ivy *(Toxicodendron radicans)*, autumn olive, white snakeroot, and Virginia creeper. This stand, which has an average DBH of 13 inches, contains three (3) significant trees and no specimen trees. The Forest Structure Analysis Sheet (Exhibit 13) indicates that this stand has a structure value of 15, which places it in the lower end of the "Priority" rating. Stand H did not exhibit any evidence of disease or insect infestation and contains a moderate percentage of invasive species cover. Due to the lack of significant environmental features (i.e. specimen trees), Stand H should be classified as a Priority 3 Forest Retention Area.

STAND I

Stand I (0.65 acre) is a mid-successional, mixed-hardwood forest containing eastern red cedar, elm, black cherry, northern red oak, and sassafras. The understory is comprised of American paw paw and eastern red cedar, while the herbaceous layer contains Japanese stiltgrass and white snakeroot. This stand, which has an average DBH of 11 inches, does not contain any significant or specimen trees. The Forest Structure Analysis Sheet (Exhibit 14) indicates that this stand has a structure value of 15, which places it in the lower end of the "Priority" rating. Stand I did not exhibit any evidence of disease or insect infestation and contains a low percentage of invasive species cover. Due to the lack of significant environmental features, Stand I should be classified as a Priority 3 Forest Retention Area.

STAND J

Stand J (3.72 acres) is an early successional, bottomland, mixed-hardwood forest dominated by black gum, willow oak (*Quercus phellos*), and red maple. The understory contains autumn olive, while the herbaceous layer contains common reed *(Phragmites australis)* and poison ivy. This stand, which has an average DBH of 10 inches, contains one (1) significant and no specimen trees. The Forest Structure Analysis Sheet (Exhibit 15) indicates that this stand has a structure value of 12, which places it in the upper end of the "Good" rating. Stand J did not exhibit any evidence of disease or insect infestation and contains a moderate percentage of invasive species cover. Due to the lack of significant environmental features, Stand J should be classified as a Priority 3 Forest Retention Area.

STAND K

Stand K (9.13 acres) is a mid-successional, mixed-hardwood forest dominated by chestnut oak (*Quercus montana*), hickory, post oak (*Quercus stellata*), and white oak. The understory contains hickory, American paw paw, and autumn olive, while the herbaceous layer contains hickory and false nettle (*Boehmeria cylindrica*). This stand, which has an average DBH of 12 inches, contains seventeen (17) significant trees and seven (7) specimen trees. The Forest Structure Analysis Sheet (Exhibit 16) indicates that this stand has a structure value of 15, which places it in the lower end of the "Priority" rating. Stand K did not exhibit any evidence of disease or insect infestation and contains a low percentage of invasive species cover. Due to the presence of significant environmental features (i.e. specimen trees, wetland, 25-foot wetland buffer), Stand K should be classified as a Priority 1 Forest Retention Area.

STAND L

Stand L (3.14 acres) is a mature, mixed-hardwood forest dominated by hackberry (*Celtis occidentalis*), black walnut, box elder, and white ash (*Fraxinus americana*). The understory contains American paw paw and autumn olive, while the herbaceous layer is dominated by Japanese stiltgrass, autumn olive, garlic mustard, American paw paw, and white snake root. This stand, which has an average DBH of 16 inches, contains eight (8) significant trees and three (3) specimen trees. The Forest Structure Analysis Sheet (Exhibit 17) indicates that this stand has a structure value of 13, which places it in the upper end of the "Good" rating. Stand L did not exhibit any evidence of disease or insect infestation and contained a moderate percentage of invasive species cover. Although there are a few large trees associated with a former home site, this stand generally lacks significant environmental features and should be classified as a Priority 3 Forest Retention Area.

QUALIFIED PROFESSIONAL CERTIFICATION

THIS PLAN COMPLIES WITH THE CURRENT REQUIREMENTS OF MONTGOMERY COUNTY CODE AND THE ENVIRONMENTAL TECHNICAL MANUAL.

SIGNED: _____ DATE: 11/29/2023

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NATURAL RESOURCE INVENTORY/FOREST STAND DELINEATION PLAN (NRI/FSD)

WSSC Grid Number: 229NW21, 229NW22, 230NW21, 230NW22 Tax Map Grid Number: BV562

Dickerson Power Plant
PLAN NO. 420240750
Montgomery County, Maryland

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Property Owner Information:
Terra Energy, LLC
13409 Strawbale Lane
Darnestown, MD 20878
540–223–3954

REVISIONS

No.	Date	Description	Rev. By	App. By
1	10/6/23	Updated titleblock, added contour labels per MNCPPC comments	HMK	MJK
2	11/29/23	Updated titleblock, notes, added watersheds, revised flow class per MNCPPC comments	KH	MJK

DATE: November 29, 2023 SCALE: As Noted C.I.: 2'

Horizontal Datum: MCS NAD 83
Vertical Datum: NAVD 88
Boundary and Topo Source: Montgomery County Digital Data Soltesz

Design	Draft	Approved
HMK	HMK	MJK

Sheet # 14 of 20

WSSI Project Number: MD2258.01

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