Natural Resources Inventory

CHRIST COMMUNITY Church Exists to Compassionately Reach and Serve the Community with the Love of Christ

Toano, Virginia

September 10, 2018 SUP 18-0024 DJG# 2160330



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Natural Resources Inventory

Project Description:

Christ Community Church is located at 9001 Richmond Road, Toano, VA. The existing church building site is zoned A1 Agriculture. This zoning class requires a special use permit to be submitted for buildings with proposed assembly uses.

The SUP requires a natural resources inventory to identify rare plants, animals and ecosystems as ranked by VA Natural Heritage and Global entities as S1, S2, S3, G1, G2 and G3.

This report provides an assessment of the location of the proposed building and associated stormwater facilities that necessitate the clearing of an existing forested area.

Study Area:

The study area includes the wooded area of the site that will be cleared. This area is adjacent to the existing gravel parking areas. See figure 1, 2 and 3 attached.



Research and Analysis:

Desktop analysis utilized three sources to generate lists of rare, threated and endangered (RTE) plant, animal and critical habitats for the study area.

U.S. Fish & Wildlife Service Environmental Conservation Online System (ECOS) and Information for Planning and Consultation (IPaC) identified possible critical areas within James City County for RTE occurrences. The Virginia Natural Heritage Data Explorer (NHDE) was accessed in order to determine whether any ranked documented natural heritage resources (NHRs) are located within the study area. RTE lists include species that have a state or federal status as well as those with global or state rankings. Virginia Natural Heritage state rarity rank are defined as follows. 'G' denotes global status.

S1 (G1) – Extremely rare, usually 5 or fewer occurrences in the state.

- S2 (G2) Very rare, usually between 5 to 20 occurrences in the state.
- S3 (G3) Rare to uncommon, usually between 20 and 100 occurrences in the state.

Habitat types and natural communities present within the study area were identified using most recent aerial imagery and ground photographs taken in 2015 and 2016. These habitat types were then cross-referenced with the list of RTE species for James City County and a determination was made as to the likelihood of each species being present within the study area.

Study Area Ecological Description

The study area is comprised of a single community type described as a young successional temperate deciduous forest.



Vantage from upper gravel parking lot, looking at proposed building area.

RTE Species

Research revealed no NHRs are documented within the study area. However, results from the NHDE indicate the possible presence of 6 RTE species within James City County. See Table 1.

Table 1 - Natural Heritage Resources

Your Criteria

Taxonomic Group: Select All; State Conservation Status Rank: Select All State Legal Status: Select All County: James City; Watershed (8 digit HUC): Select All Planning District: Select All Virginia Coastal Zone: Select All Search Run: 9/9/2018 16:11:53 PM <u>Result Summary</u> Total Species returned: 6

Total Communities returned: 0

Common Name/Natural Community FISH Atlantic Sturgeon	Scientific Name	Global Conservation Status Rank	State Conservation Status Rank	Federal Legal Status	State Legal Status	Statewide Occurrences	Virginia Coastal Zone
	Acipenser_oxyrinchus	G3	S2	LE	LE	2	Y
AMPHIBIANS Mabee's Salamander	Ambystoma_mabeei	G4	S1S2	None	LT	17	Y
VASCULAR PLANTS Sensitive Joint- vetch	Aeschynomen e virginica	G2	S2	LT	LT	22	Y
Small Whorled Pogonia	Isotria_medeoloides	G2?	S2	LT	LE	55	Y
New Jersey Rush	Juncus_caesariensis	G2G3	S2	SOC	LT	13	Y
Narrow-leaved Spatterdock	Nuphar_sagittifolia	G5T2	S1	SOC	LT	2	Y

Source: VA Natural Heritage Data Explorer

RTE Species Habitat Evaluation

Source: USDA, NatureServe Explorer and US Fish and Wildlife Service.

<u>Atlantic Sturgeon</u> – The Atlantic Sturgeon lives within large rivers and nearshore environments. The study area does not support habitat for this species.

<u>Mabee's Salamander</u> – This species occurs with fish-free vernal ponds or ephemeral coastal plain sinkholes, with surrounding forests composed of mixed hardwoods that support a pine component. The study area does not support habitat for this species because the area is not located near a pond or sinkhole. It is located outside the Army Corp of Engineers wetlands jurisdictional determination and the 100' Resource Protection Area. See attached Natural Wetlands Inventory.

<u>Sensitive Joint-Vetch</u> – This plant is located in freshwater to slightly brackish tidal marshes and adjacent wet ditches along the James, Chickahominy, Mattaponi, Pamunkey, Rappahannock and Potomac Rivers as well as their associated tributaries. The study area does not support habitat for this species because it does not contain tidal marshes or any wet ditches.

<u>Small Whorled Pogonia</u> – This species occurs in acidic mesic to dry-mesic forests, most often in mature mixed beech-oak forests. They are often found on slopes near small streams. This study area does not support habitat for this species because the area is a young forest and is not located directly adjacent a stream.

<u>New Jersey Rush</u> – The New Jersey Rush is located in bogs, sphagnous sweeps in powerline rights-of-way and peaty edges of beaver ponds. This study area does not support habitat for this species because it is composed of young forest and does not contain any boggy areas.

<u>Narrow-leaved Spatterdock</u> – This species is located in freshwater tidal aquatic beds and mud flats. The study area does not support habitat for this species because it is composed of young forest and no tidal areas.

Conclusion:

A review of literature, aerial photography, a field visit and site photographs indicates that the study area does not support habitats for the 6 RTE species possible in James City County. Therefore it is concluded that the project should not effect any RTE species because it is highly unlikely that any of these resources occur within the study area.



Figure 1. Photo of existing church as viewed from upper gravel parking area.



Figure 2. Photo of existing church as viewed from beyond lower gravel parking area. Study area is located to right of gravel driveway.



Figure 3. Photo viewed from gravel driveway looking at peninsula shaped area of study. See study area photo on page 1.

Christ Community Church



September 9, 2018

National Wetlands Inventory



Estuarine and Marine Deepwater

Estuarine and Marine Wetland

- Wetland
 - Freshwater Pond

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community