

91 Foster Sheldon Road
Wakefield, RI 02879



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Onsite Wastewater Initiative, LLC

December 13, 2020

Mr. Thomas Principe, PE
Principe Engineering, Inc.
PO Box 298, Tiverton, RI 02878
email: tom@principeengineering.com
Ph: (401) 816-5385 (office)

Re: Wetland flagging/report - 507 Curtis Corner Road, AP 39-3 Lot 7- South Kingstown, RI

Mr. Principe:

At your request, Onsite Wastewater Initiative, LLC (OWI) has completed the freshwater wetland delineation on and in the vicinity of the above referenced property. The field work was conducted by David Kalen of OWI LLC on December 6, 2022).

The referenced property is located within the jurisdiction of the RI Department of Environmental Management (RIDEM). Any work or opinions stated by OWI are subject to the review of the RIDEM and the Town of South Kingstown. Wetland delineation data forms are provided with this report that document vegetation, soils and hydrology found. Preliminary research indicate that there are forested wetlands within and in close vicinity and within the referenced property. The RIDEM requires regulatory buffers and setbacks from the established and verified wetland delineations.

The assessor's database for the Town of South Kingstown depicts A.P. 39-3, Lot 7 as a 13.42 acre parcel situated on the north side of Curtis Corner Road and also abuts South Road on the northwest. The parcel is approximately 900 feet east from the centerline intersection between South Road and Curtis Corner Road. The northern end of the parcel is approximately 775 feet north from the centerline intersection between Henry Case Way and South Road. The lot is developed with a house (dilapidated) and is situated between developed parcels to west, a mowed field to the north and a development in construction to the east (at the time of the field work).

To the southwest of the dwelling there are upland features. To the north of the dwelling there are wetland features: a deciduous forested wetland (swamp). To the north of the described swamp there are upland features, and at the very north of the property there is a pond and associated wetlands that appear to be partially on the subject property. Within these wetland resource areas, OWI staff noted additional presence of surface hydrology in the form of stained leaf litter, ponded water, saturated soil, adventitious roots, and buttressed roots.

The RIDEM Environmental Resource Map has mapped the forested wetland that is within the property and in its vicinity. The forested swamp within the property is approximately 11 acres in area (RIDEM Environmental Resource Map, without the clearly upland areas). The wetland to the north of the property (pond) appears to about an acre in size.

The flagged edge of wetlands need to be located and set on a site plan by a Professional Land Surveyor or Engineer for permitting purposes.

The Rhode Island Soil Survey (2014) depicts the lot as being comprised of Bridgehampton-Charlton complex, very stony (BnB, non-hydric) for the upland areas surrounding the dwelling and west areas of the dwelling. For the other upland areas south of the forested swamp the soil mapping unit is Wapping very stony silt loam (WcB, predominantly non-hydric). For the other upland areas, north of the forested swamp, the soils are comprised of Narragansett very stony silt loam (NbB, non-hydric) and Hinckley-Enfield complex, rolling (non-hydric). The forested swamp is comprised of Ridgebury, Whitman, and Leicester extremely stony fine sandy loams (Rf, predominantly hydric) and Wapping very stony silt loam (WcB, predominantly non-hydric). Ridgebury, Whitman, and Leicester extremely stony fine sandy loams

soils are classified as hydric and can be indicative of wetland features. The pond and associated wetland is mapped as Ridgebury, Whitman, and Leicester extremely stony fine sandy loams (Rf, predominantly hydric) .The OWI findings were fairly consistent with that of the soil survey.

OWI has established two (3) wetland flag series on the property with blue color flagging for all flags. On the ground flagging labeled WF-A1 through WF-A14 depicts the southern limits of a pond with associated marsh/wet meadow and shrub swamp to the north end of the property, that is not grazed or mowed, and is not comprised mainly of phragmites. The pond itself (surface water) appears to be less than 1/4 acre in size during the growing season (RIDEM Environmental Resource Map). This wetland continues in a northerly direction from flag WF-A1 and in a northwesterly direction from flag WF-A14.

On the ground flagging labeled WF-B1-1 through WF-B1-13 depicts the northern limits of a forested wetland (swamp) that cuts the property in half (north and south). This wetland edge continues in a northeasterly direction from flag WF-B1-1 and on a southwesterly direction from flag WF-B1-13. On the ground flagging labeled WF-B2-1 through WF-B2-26 depicts the southern limits of the same forested wetland (swamp) described above. This wetland edge continues northwesterly from flag WF-B2-1 and in a southeasterly direction from flag WF-B2-26.

The following chart has been prepared to depict the OWI flag series in relation to its classification and any applicable buffer zones. Please note that there are additional setback that may apply to any buffer zone.

OWI Flag Series	Classification	Designated Buffer Zone	Minimum Primary Building setback
WF-A1— WF-A14	Marsh (any size)	100 ft.	20ft
WF-B1-1 — WF-B1-13	Forested Swamp (> 3 acres)	50 ft.	20ft
WF-B2-1 — WF-B2-26	Forested Swamp (> 3 acres)	50 ft.	20ft

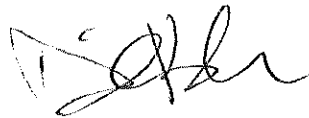
Any work proposed within these allocated buffer zones or in proximity of any wetland edge may require a permit from the RIDEM and/or the Town of South Kingstown.

This letter is the sole opinion of Onsite Wastewater Initiative, LLC. and is not to be construed in any way as an authorization from any regulatory agency. Please note that as of the date of this letter, the presence of wetlands have not been verified by the RIDEM. The RIDEM is the ultimate authority in deciding the edge of freshwater wetland areas, designated buffer zone,s and additional setbacks. If there are any questions regarding this letter or if you require further assistance, please contact us.

Summary

This report describes the field work performed by OWI. There are two wetland features on the property or its vicinity which fall under the regulatory authority of the RIDEM. These features include a forested swamp (with two fronts within the property), one pond and associated marsh and shrub wetland. Further development on this parcel may require a permit from the RIDEM or the Town of South Kingstown. Do not hesitate to contact OWI if you have any questions or require elaboration on the content of this report.

Sincerely,



Onsite Wastewater Initiative, LLC
 David Kalen, M.S., Principal
 Class IV Soil Evaluator (License D4052)

enclosures

Wetland Edge Delineation Data Form (UPLAND)

Applicant:

Wetland No. 1

Project: 507 Curtis Corner Road

Flag No. Sequence: WF-A1 through WF-A14

City/Town: South Kingstown

Date: 12/6/22

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. Quercus rubra	FACU	1. Carex pensylvanica	N/A
2. Juniperus virginiana	FACU	2.	
3.		3.	
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Quercus rubra	FACU	2. Toxicodendron radicans	FAC
3.		3.	

List other vegetative species noted which may have affected determination of the wetland edge:

Soil: SCS Soil Survey Mapping Unit: NbB (Narragansett very stony silt loam)
On Hydric Soils List? (Y/N) No

Soil Profile (Note wetland flag no. nearest soil test pit): WF-A3

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water	Soil Texture
Ap	0 - 8"	10YR 3/2	-	-	-	SL
Bw	22+	10YR 4/4	-	-	-	SL

Other indicators exhibiting an absence of wetland hydrology (e.g. absence of water marks, lack of redoximorphic features, lack of oxidized rhizospheres, etc.): no wetland hydrology observed

Landscape position: back slope

Altered/atypical situation? (describe): None

Comments:

Dormant vegetation

Wetland Edge Delineation Data Form (WETLAND)

Applicant:

Wetland No. 1

Project: 507 Curtis Corner Road

Flag No. Sequence: WF-A1 through WF-A14

City/Town: South Kingstown

Date: 12/6/22

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. Acer rubrum	FAC	1. Osmunda cinnamomea	FACW
2.		2.	
3.		3.	
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Clethra alnifolia	FACW	1. Toxicodendron radicans	FAC
2.		2.	
3.		3.	

List other vegetative species noted which may have affected determination of the wetland edge: _____

Soil: SCS Soil Survey Mapping Unit: : Rf (Ridgebury, Whitman, And Leicester extremely stony fine sandy loams)
On Hydric Soils List? (Y/N) Yes

Soil Profile (Note wetland flag no. nearest soil test pit): WF-A3

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water	Soil Texture
mucky A	0 - 5"	2.5Y 2.5/1	-	0"	8"	SiL
Bw	20"+	2.5Y 4/3	10YR 4/4	-	-	SL

Other hydrological indicators (e.g. water marks, drainage patterns, root rhizospheres, etc.; see Appendix 4(A)(4) of the Rules): stained leaf litter, buttressed roots, saturated soils, ponded water, adventitious roots.

Landscape position: toe of slope

Altered/atypical situation? (describe)

none _____

Comments: Dormant vegetation

Wetland Edge Delineation Data Form (UPLAND)

Applicant:

Wetland No. 2

Project: 507 Curtis Corner Road

Flag No. Sequence: WF-B1-1 through WF-B1-13
and: WF-B2-1 through WF-B1-26

City/Town: South Kingstown

Date: 12/6/22

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. Quercus rubra	FACU	1. Dryopteris marginalis	FACU
2. Acer rubrum	FAC	2. Carex pennsylvanica	N/A
3. Prunus serotina	FACU	3. Solidago canadensis	FACU
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Prunus serotina	FACU	1. Smilax rotundifolia	FAC
2. Acer rubrum	FAC	2. Toxicodendron radicans	FAC
3. Quercus rubra	FACU	3.	

List other vegetative species noted which may have affected determination of the wetland edge:

Soil: SCS Soil Survey Mapping Unit: WcB (Wapping very stony silt loam)
On Hydric Soils List? (Y/N) No

Soil Profile (Note wetland flag no. nearest soil test pit): WF-B2-11

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water	Soil Texture
Ap	0 - 8"	10YR 2/1	-	-	-	SL
Bw	20	10 YR 4/3	-	-	-	vfSL
C	24+	2.5Y 5/3	10 YR 4/6	-	-	vfSL

Other indicators exhibiting an absence of wetland hydrology (e.g. absence of water marks, lack of redoximorphic features, lack of oxidized rhizospheres, etc.): no wetland hydrology observed

Landscape position: slight back slope

Altered/atypical situation? (describe): None

Comments: Dormant vegetation

Wetland Edge Delineation Data Form (WETLAND)

Applicant:

Wetland No. 2

Project: 507 Curtis Corner Road

Flag No. Sequence: WF-B1-1 through WF-B1-13
and: WF-B2-1 through WF-B1-26

City/Town: South Kingstown

Date: 12/6/22

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

<u>Tree</u>	<u>Indicator Status</u>	<u>Herbs</u>	<u>Indicator Status</u>
1. Acer rubrum	FAC	1. Osmunda cinnamomea	FACW
2.		2.	
3.		3.	
<u>Saplings/Shrubs</u>		<u>Woody Vines</u>	
1. Clethra alnifolia	FACW	1. Toxicodendron radicans	FAC
2. Lindera benzoin	FACW	2.	
3.		3.	

List other vegetative species noted which may have affected determination of the wetland edge: _____

Soil: SCS Soil Survey Mapping Unit: WcB (Wapping very stony silt loam)
On Hydric Soils List? (Y/N) No

Soil Profile (Note wetland flag no. nearest soil test pit): WF-B2-11

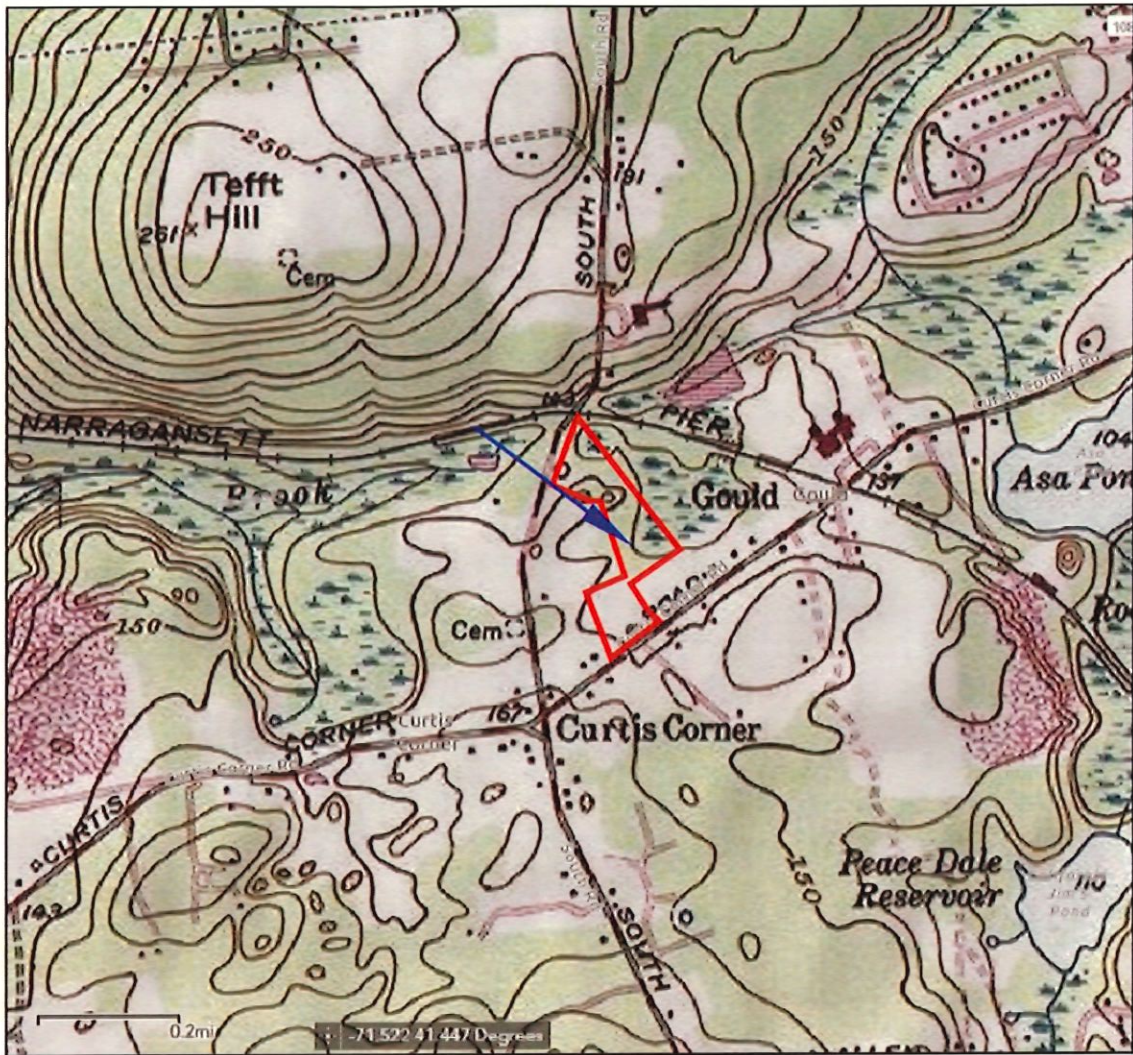
Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water	Soil Texture
A	0 - 10"	2.5Y 2.5/1	-	-	-	SiL (mucky)
Cg1	15	2.5Y 4/2	-	-	-	vfSL
Cg2	24+	2.5Y 4/2	2.5Y 5/6	-	-	vfSL

Other hydrological indicators (e.g. water marks, drainage patterns, root rhizospheres, etc.; see Appendix 4(A)(4) of the Rules): buttressed roots, saturated soil.

Landscape position: toe of slope

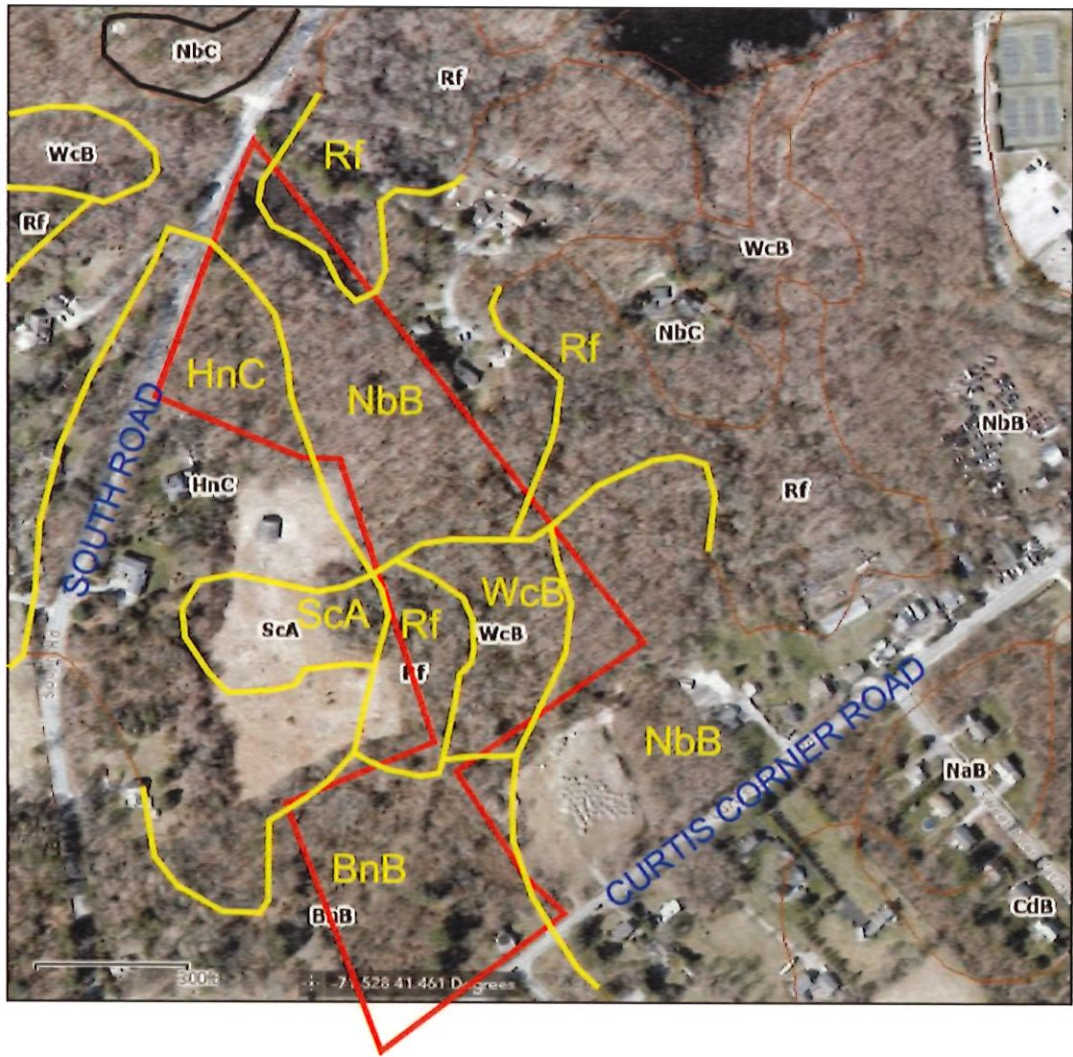
Altered/atypical situation? (describe)

Comments: Dormant vegetation



USGA Topographic Map (Kingston)
 507 Curtis Corner Rd, South Kingstown.
 (approximate property line in red)





USDA soil survey (RIDEM Environmental Resource Map)

507 Curtis Corner Rd, South Kingstown.
(approximate property line in red)





RIEMA flood map (RIDEM Environmental Resource Map)

507 Curtis Corner Rd, South Kingstown.
(approximate property line in red)





0 400 800 1200 feet

RIDEM Environmental Resource Map (wetland)

507 Curtis Corner Rd, South Kingstown.
(approximate property line in red)





Approximate wetland flag locations

507 Curtis Corner Rd, South Kingstown.
 (approximate property line in red)

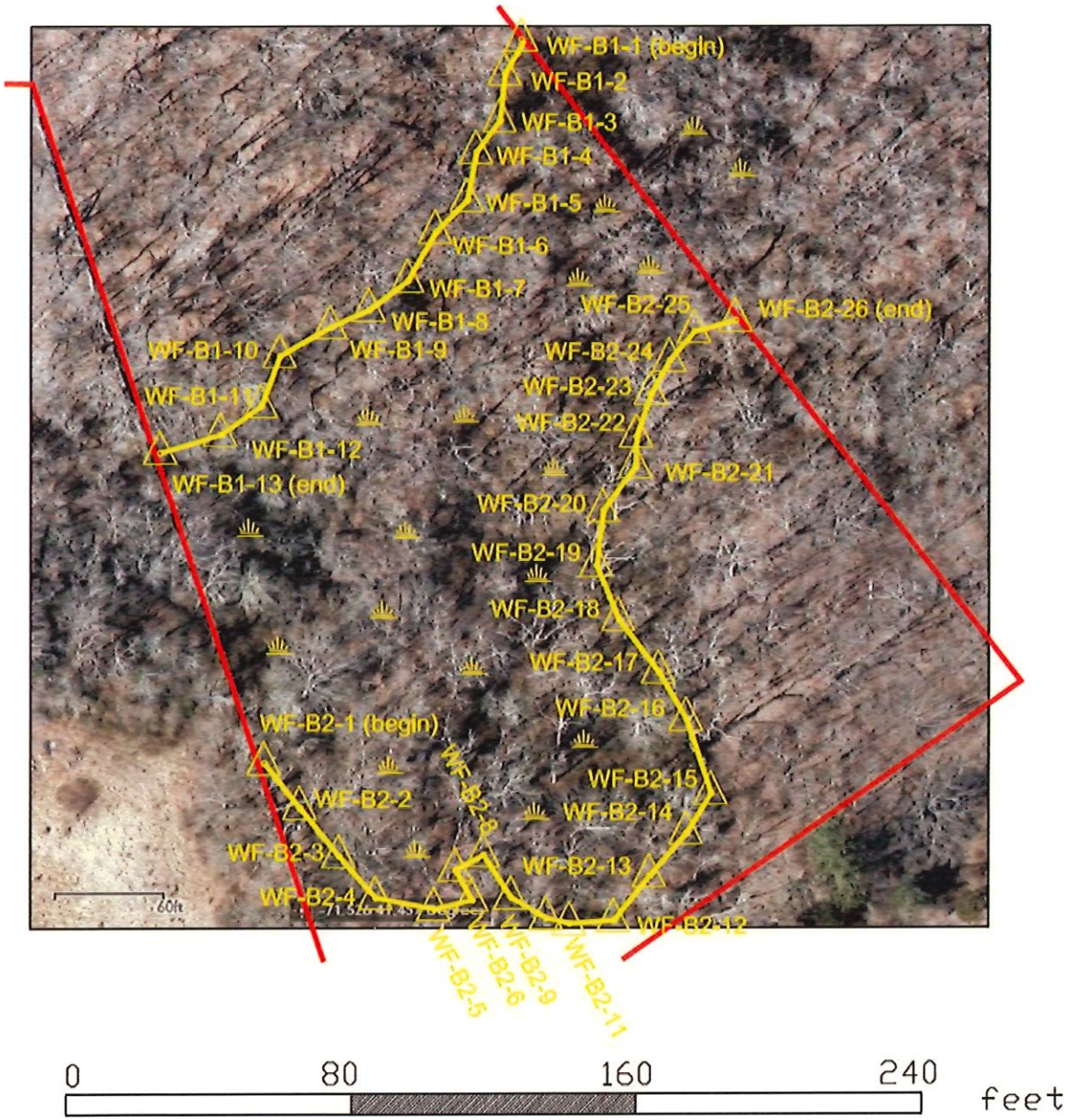




Approximate wetland
flag locations (north)

507 Curtis Corner Rd, South Kingstown.
(approximate property line in red)





Approximate wetland
flag locations (center)

507 Curtis Corner Rd, South Kingstown.
(approximate property line in red)



