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WETLANDS DELINEATION REPORT

Vanasse Hangen Brustlin, Inc.

Date: May 15, 2009

Project No.: 40505.05

Prepared For: Mr. Scott Chasse
All-Points Technology Corp., P.C.
3 Saddlebrook Drive
Killingworth, Connecticut 06419

Site Location: T-Mobile Site No. CTNL310 – 23 Stonybrook Road
23 Stonybrook Road
Stratford, Connecticut

Site Map: VHB Wetland Sketch on APT Site Plan, 04/22/09

Inspection Date: April 22, 2009

Field Conditions: Weather: rain, low 50's
Snow Depth: none
General Soil Moisture: moist
Frost Depth: none

Type of Wetlands Identified and Delineated:

Connecticut Inland Wetlands and Watercourses	☒
Connecticut Tidal Wetlands	☐
U.S. Army Corps of Engineers	☐

Local Inland Wetland Regulated Upland Review Areas: Wetlands: 50 feet Watercourses: 50 feet

Field Numbering Sequence of Wetlands Boundary: WF 1 - 11
[as depicted on attached wetland sketch map]

The classification systems of the National Cooperative Soil Survey, the U.S. Department of Agriculture, Natural Resources Conservation Service, County Soil Survey Identification Legend, Connecticut Department of Environmental Protection and United States Army Corps of Engineers New England District were used in this investigation.

All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

The wetlands delineation was conducted and reviewed by:

Dean Gustafson
Professional Soil Scientist

Enclosures

54 Tuttle Place
Middletown, Connecticut 06457-1847
860.632.1500 ▪ FAX 860.632.7879
email: info@vhb.com
www.vhb.com

Attachments

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- Wetland Delineation Field Form
- Soil Map
- Soil Report
- Wetland Delineation Sketch Map

Wetland Delineation Field Form

Project Address:	23 Stonybrook Road Stratford, CT	Project Number:	40505.05
Inspection Date:	4/22/09	Inspector:	Dean Gustafson, PSS
Wetland I.D.:	Wetland 1		

Field Conditions:	Weather: rain, low 50's	Snow Depth: none
	General Soil Moisture: moist	Frost Depth: none
Type of Wetland Delineation:	CT Inland ☒	
	CT Tidal ☐	
	ACOE ☐	
Field Numbering Sequence: WF 1 to 11		

WETLAND HYDROLOGY:

NONTIDAL

Regularly Flooded ☐	Irregularly Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☒	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☐
Comments:		

TIDAL

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Seasonally Flooded ☐	Temporarily Flooded ☐	
Comments: N/A		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☒	Palustrine ☐
Lacustrine ☐	Marine ☐	
Comments:		

CLASS:

Emergent ☒	Scrub-shrub ☒	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments:		

WATERCOURSE TYPE:

Perennial ☒	Intermittent ☐	Tidal ☐
Comments: Bruce Brook flows southwest through the site in a steeply incised stone armored channel		

SPECIAL AQUATIC HABITAT:

Vernal Pool ☐	Other ☐	
Comments: N/A		

Wetland Delineation Field Form (Cont.)

MAPPED SOILS:

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Sutton-Urban Land complex (250)	☐	☒	☒	☒
Urban Land (307)	☐	☒	☒	☒
Water (W)	☒	☐	☐	☒
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

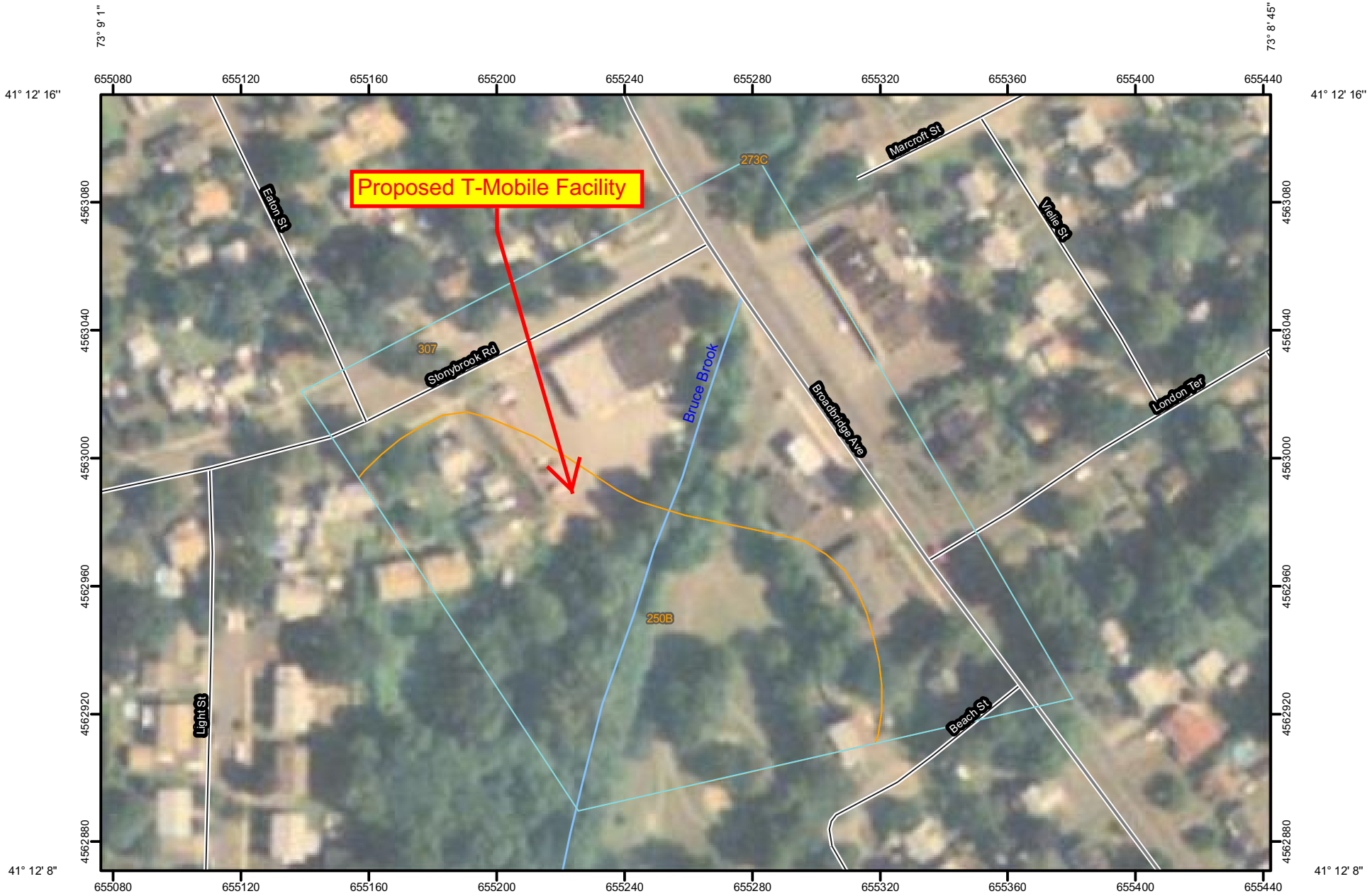
DOMINANT PLANTS:

red maple (*Acer rubrum*)	Norway maple (*Acer platanoides*)
black cherry (*Prunus serotina*)	buttonbush (*Cephalanthus occidentalis*)
black locust (*Robinia psuedoacacia*)	silky dogwood (*Cornus amomum*)
multiflora rose (*Rosa multiflora*)	speckled alder (*Alnus rugosa*)
fox grape (*Vitis labrusca*)	gray birch (*Betula populifolia*)
garlic mustard (*Alliaria petiolata*)	Japanese knotweed (*Polygonum cuspidatum*)
black willow (*Salix nigra*)	

WETLAND NARRATIVE:

Wetland 1 is characterized as the top of eroded bank of Bruce Brook. No bordering wetlands were identified on the subject property. The subject property consists of a commercial retail building and paved parking area. The proposed T-Mobile Facility is located in the southwest corner of the parking lot. Bruce Brook is characterized as a steeply incised fill embanked channel that contains some areas of stone armoring. The property's development extends up to the top of bank to Bruce Brook resulting in minimal vegetative cover buffering the stream. The banks of the perennial stream are dominated by red maple (*Acer rubrum*), black cherry (*Prunus serotina*), black locust (*Robinia pseudoacacia*), fox grape (*Vitis labrusca*), black willow (*Salix nigra*), gray birch (*Betula populifolia*), speckled alder (*Alnus rugosa*), silky dogwood (*Cornus amomum*), and buttonbush (*Cephalanthus occidentalis*). Invasive species are also contained within the vegetated banks of the stream reflecting the disturbed nature (fill embankements) of the stream. Invasive species identified include Japanese knotweed (*Polygonum cuspidatum*), garlic mustard (*Alliaria petiolata*), multiflora rose (*Rosa multiflora*), and Norway maple (*Acer platanoides*).

Soil Map—State of Connecticut
(23 Stonybrook Road, Stratford, CT)



Map Scale: 1:1,740 if printed on A size (8.5" x 11") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:1,740 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 6, Mar 22, 2007

Date(s) aerial images were photographed: 8/14/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
250B	Sutton-Urban land complex, 0 to 8 percent slopes	2.9	43.1%
273C	Urban land-Charlton-Chatfield complex, rocky, 3 to 15 percent slopes	0.0	0.0%
307	Urban land	3.9	56.9%
Totals for Area of Interest		**6.8**	**100.0%**

Map Unit Description (Brief)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Description (Brief)" report gives a brief, general description of the major soils that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief)

State of Connecticut

Description Category: SOI

Map Unit: 250B—Sutton-Urban land complex, 0 to 8 percent slopes

Sutton-Urban Land Complex, 0 To 8 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 40 percent Sutton soils, 35 percent Urban Land. 25 percent minor components. Sutton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from schist, gneiss, and granite. The slope ranges from 0 to 8 percent and the runoff class is very low. The depth to a restrictive feature is greater than 60 inches. The drainage class is moderately well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 7.5 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 24 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 2w Typical Profile: 0 to 6 inches; fine sandy loam 6 to 12 inches; fine sandy loam 12 to 24 inches; fine sandy loam 24 to 28 inches; fine sandy loam 28 to 36 inches; gravelly fine sandy loam 36 to 65 inches; gravelly sandy loam Urban Land Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 0 to 8 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

Map Unit: 273C—Urban land-Charlton-Chatfield complex, rocky, 3 to 15 percent slopes

Urban Land-Charlton-Chatfield Complex, Rocky, 3 To 15 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 35 percent Urban Land, 25 percent Charlton soils, 15 percent Chatfield soils. 25 percent minor components. Urban Land Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 3 to 15 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8 Charlton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, schist, and gneiss. The slope ranges from 3 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 6.4 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 3e Typical Profile: 0 to 4 inches; fine sandy loam 4 to 7 inches; fine sandy loam 7 to 19 inches; fine sandy loam 19 to 27 inches; gravelly fine sandy loam 27 to 65 inches; gravelly fine sandy loam Chatfield soils This component occurs on upland hill and ridge landforms. The parent material consists of melt-out till derived from gneiss, granite, and schist. The slope ranges from 3 to 15 percent and the runoff class is low. The depth to a restrictive feature is 20 to 40 inches to bedrock (lithic). The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 3.3 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 3e Typical Profile: 0 to 1 inches; highly decomposed plant material 1 to 6 inches; gravelly fine sandy loam 6 to 15 inches; gravelly fine sandy loam 15 to 29 inches; gravelly fine sandy loam 29 to 36 inches; unweathered bedrock

Map Unit: 307—Urban land

Urban Land This map unit is in the New England and Eastern New York Upland, Southern Part Connecticut Valley Major Land Resource Area. The mean annual precipitation is 38 to 50 inches (965 to 1270 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Urban Land. 20 percent minor components. Urban Land Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 0 to 45 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

Data Source Information

Soil Survey Area: State of Connecticut
Survey Area Data: Version 6, Mar 22, 2007

ALL-POINTS TECHNOLOGY CORPORATION, P.C.	APT FILING NUMBER: CT-255T-430	T-Mobile	T-MOBILE SITE NUMBER: CTFF310
3 SADDLEBROOK DRIVE KILLINGWORTH, CT. 06419 PHONE: (860)-663-1697 FAX: (860)-663-0935 www.allpointstech.com	LE-1	35 GRIFFIN ROAD BLOOMFIELD, CT 06002 OFFICE: (860)-692-7100	23 STONYBROOK ROAD 23 STONYBROOK ROAD STRATFORD, CT 06614
	SCALE: AS NOTED / DRAWN BY: AAJ		
	DATE: 03/06/09 / CHECKED BY: SMC		

NOTE:
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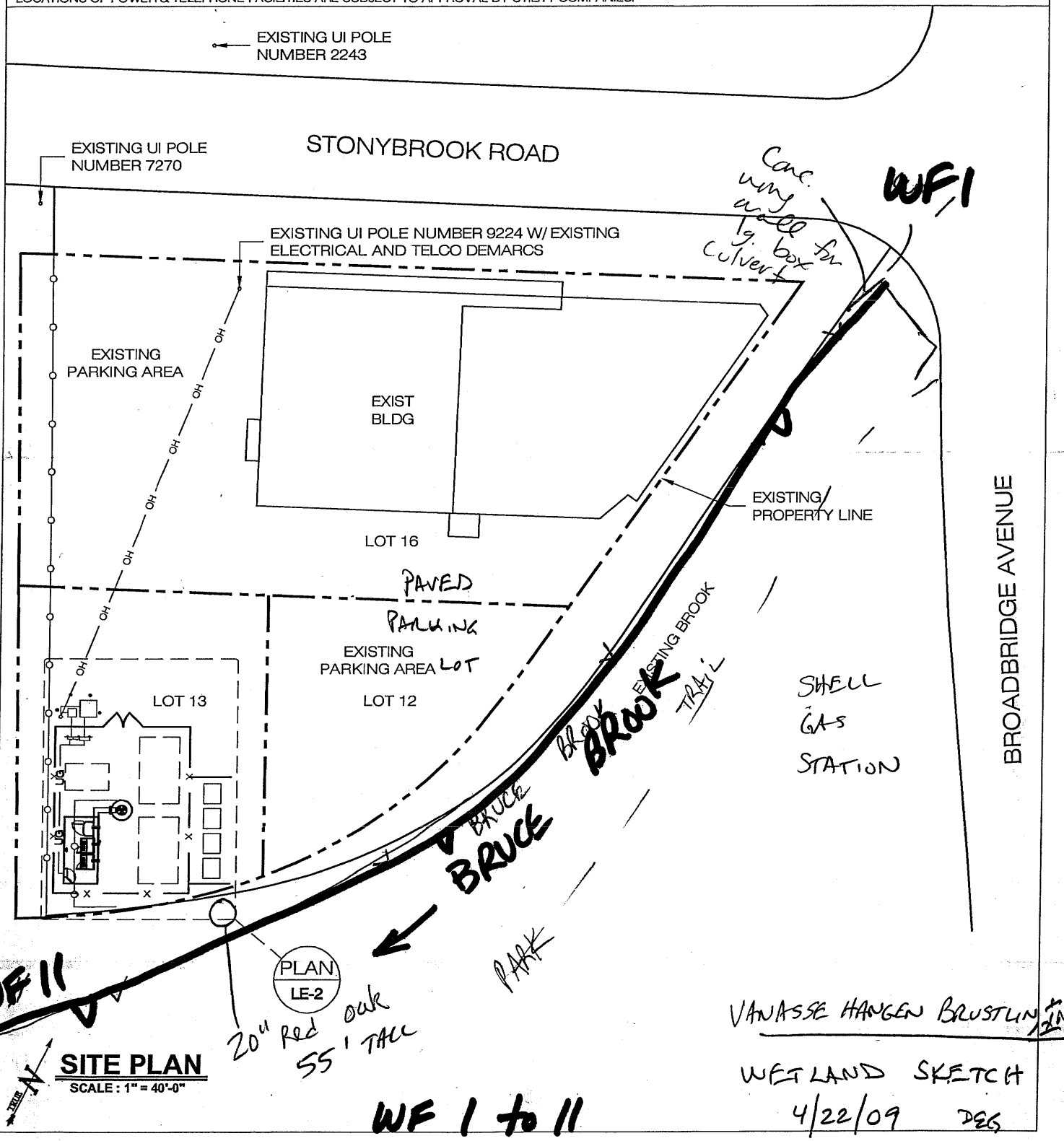

SITE PLAN
SCALE : 1" = 40'-0"

VANASSE HANGEN BRUSTLIN, INC.

WETLAND SKETCH
4/22/09 DEG

WF 1 to 11