ROBERT LAGA Chairman

ANTHONY DUSOVIC Vice-Chair

ROSE TROMBETTA Secretary

DAVID KLOTZLE Wetland Inspector

## TOWN OF CARMEL

ENVIRONMENTAL CONSERVATION BOARD



60 McAlpin Avenue Mahopac, New York 10541 Tel. (845) 628-1500 - Ext. 190 www.ci.carmel.ny.us

#### **BOARD MEMBERS**

Edward Barnett Marc Pekowsky Vincent Turano Nicholas Fannin John Starace

#### **ENVIRONMENTAL CONSERVATION BOARD AGENDA**

#### FEBRUARY 4, 2016 - 7:30 P.M.

#### SUBMISSION OF AN APPLICATION OR LETTER OR PERMISSION

<u>APPLICANT</u>	ADDRESS	<u>TAX MAP #</u>	<b>COMMENTS</b>
<ol> <li>Lake Plaza Shopping Center (Proposed Stop &amp; Shop)</li> </ol>	983-1005 Route 6	65.10-1-45&46	Planning Board Referral (Amended Site Plan)

#### **MISCELLANEOUS**

2. Minutes - 01/21/16



January 28, 2016

Ref: 41929.00

Via Hand Delivery

Chairman Robert Laga and Members of the Town of Carmel Environmental Conservation Board Town of Carmel 60 McAlpin Avenue Mahopac, New York 10541

Re: Lake Plaza Shopping Center 983-1005 Route 6, Mahopac, NY 10541 Tax Map #65.10-1-45 & 46 Wetland Permit Application

Dear Chairman Laga and Environmental Conservation Board Members,

On behalf of Lake Plaza Shopping Center, LLC ("(theoApptiliant"),)VHB Engineering, Surveying and Landscape Architecture, P.C. ("VHB") submits the enclosed wetland permit application and related information set forth below in support of the Applicant'sspropposablas described more fully in the project narrative submitted herewith, to expand and improve the Lake Plaza Shopping Center, which is located at Route 6 and Baldwin Lane in the hamlet of Mahopac.

- 5 copies: Proposed Stop & Shop Wetland Permit Application package, prepared by VHB environmental scientist Erika Reeves, last revised January 28, 2016. Included within the application package are the following supporting materials:
  - Wetland Permit Application Narrative, including summarized proposed project, existing conditions, natural resources assessment, proposed wetland buffer impacts, and agency consultation summary.
  - •• Wetland Permit Application Form
  - Property Deed
  - Property owner letter of consent
  - •• Site Plans, last revised December 31, 2015
  - Figures 1-6 in support of the natural resource assessments

50 Main Street Suite 360 White Plains, New York 10605 Pt914.467 6600 Fr914 761.3759

EEggineers \$50 mittats PPlanners DBeiggners

Town of Carmel Environmental Conservation Board Ref: 41929.00 January 28, 2016 Page 2



- •• Figure 7: FEMA/FIRM
- Summary Tables 1-3 in support of the natural resource assessment of soils, wetlands, and waters.
- USACE wetland determination data forms
- Stream data forms
- Photo log documentation of site conditions, land cover, wetlands, and waters.
- Rare, Threatened, and Endangered Species documentation, including consultation with the New York Natural Heritage Program and U.S. Fish and Wildlife Information Planning and Conservation.
- Historic and Cultural Resource documentation, including letter of no effect from the NYS Office of Parks, Recreation and Historic Preservation.
- NYS Department of Environmental Conservation consultations, including review of freshwater wetlands to date. Consultation is on-going and may require a Freshwater Wetlands permit.
- Environmental Assessment Form, as previously submitted to the Planning Board on November 30, 2015 in support of State Environmental Quality Review.
- Erosion and Sediment Control and Stormwater Pollution Prevention Plan, last revised on and submitted to the Town Planning Board on November 30, 2015.
- 1 original: Wetland Permit Application Form
- 1 original: Property owner letter of consent

1 CD: Electronic copy of all submission with all materials noted above.

Fee and Escrow: Enclosed are two checks, for the amount of \$1000 for the associated wetland permit application fee; and \$1000 for the escrow required by the Town of Carmel wetland investigator.

Please feel free to contact me at (914) 467-6607, or <u>mwjunghans@vhb.com</u>if you have any questions or require further information.

Sincerely,

Director of Land Engineering VHB Engineering, Land Survey and Landscape Architecture PC

Town of Carmel Environmental Conservation Board Ref: 41929.00 January 28, 2016 Page 3



 CC: Hon. Harold Gary, Chairman and Members of the Planning Board Mr. Michael Carnazza, Director of Codes Enforcement/Building Inspector Mr. Robert Heidenberg Mr. Pablo Medeiros Mr. Jason Lazar Mr. Pasquale Natale Ms. Cynthia Hanenberg John Canning, P.E. Geraldine N. Tortorella, Esq. Ms. Deborah Farr

## Wetland Permit Application

### Towm off Carmell Environmental Conservation Board

#### Proposed Stop & Shop

9833-10055 UJSS. Route:66

Mahopac, TownoffCarmel

PutnamCounty, New York 105411

REFERENCE NUMBER

PREPARED FOR

LakkePlaza:Shloppinig:CenteerLLCC Heidenblerg:Ploperties:Gioupp 2334ClosteerDockkRoadd ClosteerNJ.076244

PREPARED BY



VHBERgineering; Sürveying; and Landscape:Architecture; PEC. 1000GBeat/Oaks:BBoulevardd Stritee1188 Addamy; NYY122033 518:889:36000

January 28, 2016



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

## **Table of Contents**

1.	Project [	Description	
	1.1.	Proposed Project	1
	1.2.	Existing Conditions	2
2.	Natural	Resource Assessment	4
	2.1.	Soils	4
	2.2.	Land Cover	5
	2.3.	Wetlands	5
		2.3.1. Background	5
		2.3.2. Methods	6
		2.3.3. Results	7
	2.4.	Waters	8
		2.4.1. Background	8
		2.4.2. Methods	8
		2.4.3. Results	9
	2.5.	Floodplains	10
	2.6.	Rare, Threatened, and Endangered Species	
		2.6.1. Background	10
		2.6.2. Bog Turtle	
		2.6.3. Indiana Bat & Northern Long-eared Bat	11
3.	Propose	d Project Impacts	13
	3.1.	Wetlands and Waters	13
	3.2.	Rare, Threatened, and Endangered Species	14
	3.3.	Historic and Cultural Resources	14



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

4.	Summary of Conclusions	15
Ref	erences	16



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

## **List of Appendices**

- A. Permit Application Form (Copy only, original provided with cover letter)
- B. Property Deed
- C. Owmee's Consent (Copy only, original provided with cover letter)
- D. Site Plans: Sheets C-00 through C-20
- E. Figures

Figure 1. Site Location Figure 2. Soils Map Figure 3. Federal and State Mapped Wetlands Figure 4. Land Cover Figure 5. Natural Resource Map Figure 6: Flow Map

- Figure 7: FEMA/FIRM
- F. Tables

Table 1: Summary of Soils

Table 2: Summary of Delineated Wetlands

Table 3: Summary of Delineated Streams

- G. USACE Wetland Determination Data Forms
- H. Stream Data Forms
- I. Photo Log
- J. Rare, Threatened, and Endangered Species Documentation

J.1. NYNHP Request for Information, NYNHP No Effect Letter

- J.2. USFWS IPaC Official Species List
- K. Cultural Resource Documentation



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

List of Appendices, Conti.

- L. NYSDEC Review of Freshwater Wetlands Documentation
- M. Environmental Assessment Form (Copy provided; original EAF submitted to the Planning Board, which has circulated a Notice of Intent to serve as Lead Agency in the SEQRA review of this action.)
- N. Erosion & Sediment Control Plan and Stormwater Pollution Prevetion Plan (*Please see separate attachment*)



Town of Carmel, NY ECB Proposed Stop & Shop, Mahopac New York

# 1

## Introduction

#### 1.1 Proposed Project

The proposed Stop & Shop project consists of the renovation and expansion of the Lake Plaza Shopping Center located at 983-1005 Route 6, at the intersection of Route 6 and Baldwin Lane in the Hamlet of Mahopac, Town of Carmel, Putnam County, New York.

The proposed project will include the following actions:

- 1. Demolishing the existing 24,000 square foot supermarket and the adjacent 7,800 square foot retail space, replacing the demolished supermarket with an approximately 53,595 square foot Stop & Shop supermarket and an adjacent 3,785 square feet of retail space, adding Stop & Shop wall signs, and substituting Stop & Shop on the existing pylon sign for the Shopping Center;
- 2. Renovating the facade of the balance of the Shopping Center, with the exception of the Kmart building on the southern portion of the site;
- 3. Constructing additional parking to replace the existing fourteen parking spaces that will be eliminated and accommodate increased building area so that the existing parking ratio is maintained;
- 4. Upgrading the parking area, lighting and landscaping serving the entire Shopping Center, and
- 5. Constructing a water supply, a sanitary sewer, and stormwater water management improvements.

A new well will be added to the system to create redundancy in the existing system. The existing sanitary sewer system has capacity for the increased flows expected from the project. Only minor improvements to make the connection are required, in the



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

form of a slight shift of the force main to the east. Stormwater management facilities (catch basins, pipes, sand filters, detention system and similar features) have been designed in the area to be disturbed to collect, treat and transport stormwater runoff from new impervious surfaces that ultimately discharge into the off-site wetlands located south of the Property.

Substantial renovations of the front parking field are intended to improve the safety, functionality, and overall aesthetic appearance of the Center while utilizing sustainable practices. This effort will include resurfacing and restriping the parking lot, installing new islands, where appropriate, to better define the drive aisles and introduce uniformity in the layout, installing new and more LED lighting, and installing new landscaping to augment existing plantings for screening purposes (especially along Baldwin Lane) and create a more uniform appearance throughout the parking field. These improvements complement the green building practices to be employed by The Stop & Shop Supermarket Company, LLC in its new building.

A complete set of site plans for the Proposed Stop & Shop project has been provided (**Appendix D: C-00 – C-20**). VHB believes this planset includes sufficient details within the Existing Conditions (C-03), Layout and Materials (C-04), Grading and Drainage (C-05), and Erosion and Sediment Control (C-07) pages specific to the Environmental Conservation Board (ECB) wetland permit application requirements.

In addition, several figures have been prepared to assist the Environmental Conservation Board in their review as part of the Natural Resources Assessment detailed in Section 2.1 (**Appendix E: Figures 1-7**). A copy of the completed full Environmental Assessment Form (**Appendix M**) has also been provided.

#### 1.2. Existing Conditions

The Property, commonly referred to as the Lake PlazaaShloppining@Genteerissaa"Designeed Shloppining@Genteeri'unddeethleeTown/ssCoddeanddissimproved with approximately 141,000 squareeféett('(sf.f.)')offretaililspace, correntlyyanchloreddbyyaafóoddmarkettanddKinart,t, together with related parking, utilities, mechanical, drainage, sewage, and potable water systems, signage, landscaping, and lighting (collectively/thlee'Center()).

The Center was originally approved and constructed over a course of years from the latee1970@stoothleeeaalyy1980@s. "PhaseeIT" offthleeCenter, consisted of faasupermaaklet, phasmacy, 10,94400squareefeet(("sff")) of fadditional retail ispace, a free-standing photo kiosk and related improvements. "PhaseeIII," consisted of fadditional retail istores, thee building currently occupied by Kmart, the wastewater treatment plant that formerly



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

served the Center, and related improvements took place in the late 1970s and 1980. In 1981, the freestanding bank (now Key Bank) in the front portion of the Center was built.

The project site is a portion of the approximately 21 acre parcel (Section 65.10, Block 1, Lot 45) and is generally bound by U.S. Route 6 and commercial businesses to the west, Baldwin Lane to the north, scrub-shrub and forested areas paralleling Cortlandt Road to the east, undeveloped ridgeline and forested wetlands to the south.

The topography of the site undulates gradually within the Center, with the majority of the site ranging in elevation of between 630 feet to 644 feet above mean sea level (AMSL). Behind the plaza is a steep ridge, where the highest point of elevation is 729 feet AMSL at at the southeast corner. The grade significantly drops from the south east corner of the parcel west towards the plaza, with slopes of 25% or more present. The slope has a more gradual decline towards the northeast (**Appendix D: C-03**).



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

# 2

## **Natural Resources Assessment**

VHB has performed desktop analyses, field inspections, wetland delineations, water course delineations, and rare, threatened, and endangered species habitat assessments on behalf of the Applicant, Lake Plaza Shopping Center, LLC for the study area of 20.74 acres, as illustrated by "Study Akeaa" with him the site location mapp (Appendix E: Figure 1).

#### 2.1 Soils

VHB conducted a desktop review of soils via Web Soil Survey prior to performing environmental surveys (NRCS, 2015). The VHB study area is comprised of seven soil types, including: Fluvaquents-Udifluvents complex (Ff), Paxton fine sandy Ioam, 8 to 15 percent slopes (PnC), Paxton fine sandy Ioam, 15 to 25 percent slopes (PnD), Ridgebury Ioam, 3 to 8 percent slopes (RdB), Ridgebruy Ioam, 2 to 8 percent slopes, very stony (RgB), Urban Land (Uf), and Woodbridge Ioam (WdC).

Table 1 provides a summary of soils with soil type, landform, drainage class, hydric soil designation, and the quantity of each soil type within the site (**Appendix F: Table 1**). The hydric soils present within the study area are: Fluvaquents-Udifluvents complex, Ridgebury loam, 3 to 8 percent slopes, Ridgebury loam, 2 to 8 percent slopes, and Woodbridge loam.

A map depicting the soil units present within the study area has been provided (**Appendix E: Figure 2**).



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

#### 2.2 Land Cover

A desktop review of federally and New York State mapped wetlands identified a federal wetland (USFWS, 2009) and New York State Department of Environmental Conservation (NYSDEC) regulated wetland LC-32 (Class II) present on site (NYSDEC, 2015). A map of known federal and state wetlands is provided (**Appendix E: Figure 3**). A natural resource assessment delineated four wetlands and three streams during December of 2014, as defined in Section 2.3 and 2.4.

Desktop and in-field reviews identified five primary community types present on site, including: palustrine forested wetland dominated by silver and red maples, hemlock — northern hardwood forest (upland forest), rich mesophytic forest (upland forest), upland successional scrub-shrub, open water, and urban structures and facilities (Edinger, G. J. et al, 2014). A portion of the upland successional scrub-shrub has been previously disturbed, with open areas and access road areas present. A map illustrating the land cover areas has been provided (**Appendix E: Figure 4**).

#### 2.3 Wetlands

VHB has delineated four wetland features within the study area, including palustrine emergent and palustrine forested wetlands: Wetland 1 (W1), Wetland 1A (W1A), Wetland 2 (W2), and Wetland 3 (W3). Of these, W1 and W1A are generally in the northeast, W2 is in the southwest, and W3 at the west edge of the study area, as illustrated by the Natural Resource Series mapping (**Appendix E: Figure 5**).

#### 2.3.1 Background

Wetlands are a subset of the "WatersoofthleeUhitiedStatess"thlattmay be subject to regulation under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Wetlands are defined by key indicators, where under normal circumstances they support a "prevalence off vegetation typically adapted four life in saturated solil conditionss"." Wetland development is regulated by the CWA of 1972.



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

For most forms of development in New York State, the United States Army Corp of Engineers (USACE) and NYSDEC are responsible for protecting wetlands from pollutants, or activities that may result in the discharge of dredged or fill material into Waters of the United States. NYSDEC also regulates the 100 foot upland buffer of mapped NYSDEC wetlands and wetlands of at least 12.4 acres in size. They may also assert jurisdiction of wetland areas within 50 meters of a regulated area if a hydrologic connection exists. The Town of Carmel and New York City Department of Environmental Protection also regulates wetlands and watercourses, and their associated 100 foot buffer area.

#### 2.3.2 Methods

VHB Environmental Scientist, Erika Reeves, delineated wetlands and collected dataform information on December 2 and 3, 2014. The wetland delineations were conducted according to the methodology detailed in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) ("(Regional Supplement")") (USACEE 2002)*, the July 1995 *New York State Freshwater Wetlands Delineation Manual* (NYSDEC, 1995), and Chapter 89 of the Town of Carmel Town Code.

To be a wetland, this federal and state methodology requires the evidence of three criteria: a dominance of hydrophytic vegetation, hydric soils, and hydrology. On December 3, 2014, VHB collected USACE Wetland Determination data forms to document the wetland criteria observed (**Appendix G**). At the time of delineation, only W1 was within 100 feet of the project limit of disturbance. No dataforms were collected for W1A, W2, or W3; however, typical vegetation and wetland indicator notes were collected (**Appendix F: Table 2**).

The wetland areas identified and delineated qualified as local wetlands based on the definitions provided in the Chlapter 899 off the Carmel Towan Code, "Freshwateer Wetlands". Alliwetlandsidentified are federally jurisdictional, however only those meeting 12.4 acres in size or currently mapped as a NYSDEC wetland are jurisdictional to the state. VHB is confident no other local, state, or federal wetlands exist on site based upon all three definitions.

The most recent plant list was utilized to confirm hydrophytic vegetation (Lichvar, R.W. et. al., 2014). Observations were also recorded during the delineation to describe general characteristics, determine potential functions and values, as well as, to classify



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

wetlands in accordance with the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, L.M. et. al., 1979), and Chapter 89 of the Town Code. Wetlands were demarcated in the field with pinkk"Wetland Delineation/f"flagging, labeled with unique flag ID codes, which include the wetland number and flag number (i.e., W1-1). Wetland flags were located in the field using a Trimble® GPS unit capable of sub-meter accuracy and post-processed using Trimble® Positions software for enhanced accuracy. A licensed land surveyor later collected the flag locations for inclusion in site plans.

#### 2.3.3 Results

A total of four wetland areas were delineated on site, including palustrine emergent and palustrine forested wetlands. A natural resource map series (**Appendix E: Figure 5**) and table summary (**Appendix F: Table 2**) has been prepared to illustrate and characterize each wetland area.

Wetland 1 (W1) is a linear depression feature, at least partially excavated as a drainage diversion to catch surface flow from the east before it reaches the shopping plaza. This area has since developed wetland indicators and receives hydrology from surface flow and seasonal high water tables at the toe of slope. This palustrine forested wetland originates at the base of ephemeral Stream 1 (S1), flows generally northwest into intermittent Stream 2 (S2), and then continues west as a wetland fringe along Stream 2. This wetland system terminates where Stream 2 drains into an existing culvert north of the site (Flag S2-618). An additional pocket of palustrine emergent wetland fringe along Stream 2 is located to the east, labeled as Wetland 1A (W1A) near Baldwin Lane.

Wetland 2 (W2) was delineated only where directly adjacent to the Center. As noted on the Natural Resources Map, this wetland continues both to the west and south of the Site. This wetland is part of a large forested wetland system mapped as NYSDEC Wetland LC-32 beginning at the toe of slope and continuing south to Mud Pond. Although a forested system, this wetland is primarily composed of invasive species such as Common Reed (*Phragmites australis*), Purple loosestrive (*Lythrum salicaria*), and Multiflora Rose (*Rosa multiflora*) near the commercial areas.

Wetland 3 (W3) is a small isolated wetland within 100 feet of the Site. The adjacent side of Wetland 3 was delineated. The isolated wetland is contained by parking lot on the east, parking lot and commercial area to the north, a commercial building to the west and southwest, and additional parking lot areas to the south. The wetland appears to be an old detention basin that has not been maintained, and has since developed wetland criteria.



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

Complete wetland determination data forms were provided for W1, including both wetland and upland data points (**Appendix G**). Photos of the individual plots are included with the dataforms; additional photos of general wetland and upland views are provided in the Photo Log (**Appendix I**).

#### 2.4 Streams

A total of three water features were delineated within the study area. S1 was determined to be ephemeral; flowing through an existing trench northwest until dispersing into W1. S2 originates from outside of the study area; east of Cortlandt Road and flows through W1A and W1 into a HDPE culvert. VHB assumed that the outlet of S2 flows through a culvert into S3 (**Appendix E: Figure 6**). S3 begins at the culvert outlet, and flows south into W2, the flagged boundary of NYSDEC regulated wetland LC-32 (Class II).

#### 2.4.1 Background

In addition to wetlands, Waters of the United States are also regulated under the CWA. Simply stated, Waters of the U.S. are defined by waters traditionally (currently or in the past) used for for interstate or foreign commerce; as well as, a tributary of, or a feature containing aa "significant tnexus" or connection too aattaditional navigable waterwayy (TNW). Generally, a stream with at least intermittent or seasonal flow is considered jurisdictional under the CWA. Similar to wetlands, Waters of the U.S. are regulated under Section 404; navigable waterways are also regulated under Section 10 of the CWA. Watercourses with at least intermittent flow regime and their 100 foot buffer are regulated by the Town of Carmel and NYCDEP.

#### 2.4.2 Methods

Waters and streams were identified and delineated in the field according to the guidanceeinnthee"Regulatory Guidance Letter: Subject – Ordinony/HighhWateer("(OHWV)") Identification" (USA/OEE2005)) and Chapter 89 of the Town Code. During field work, flow regimes were classified as perennial, seasonal, intermittent, or ephemeral and are determined based on qualitative observations of in-stream hydrology at the time of



Town of Carmel, NY ECB Proposed Stop & Shop, Mahopac New York

observation and existing geomorphic characteristics. Observations were made during the delineation to record stream characteristics such as channel substrate, surrounding land use, as well as, OHW measurements to complete a basic assessment of physical and habitat characteristics (**Appendix H**).

Narrow streams (generally ephemeral or small intermittent streams with channel widths of less than four feet) were delineated along the centerline. Larger streams (large intermittent to perennial streams) were surveyed with two lines, each at the top of bank (TOB). Streams were demarcated in the field using blue survey tape, labeled with unique flag ID codes which includes the stream number and flag number (i.e., S1-1). Stream flags were surveyed using the same method as the wetland flags; then located by a licensed land surveyor.

#### 2.4.3 Results

VHB has delineated three stream features within or near the project site. Stream 1 and 2 are in the northeast corner, and Stream 3 is in the southwest corner of the the study area (**Appendix E: Figure 5**).

Stream 1 (S1) originates at the base of an ATV trail, where surface run off collects and flows downhill along an existing trench. Despite erosional conditions present in the stream, there are indications of start and stop flow; suggesting this stream to be ephemeral; flowing only in response to storm events. At the bottom of this stream (Flag S1-605) the topography flattens out along the toe-of-slope; where flow disperses into W1.

Stream 2 (S2) originates from an offsite wetland and stream drainage area to the east of Cortlandt Road. S2 then flows through an HDPE culvert under Cortlandt Road, generally flowing northwest until it continues underground via a culvert (Flag S2-618). Based on the culvert information available, VHB believes the outlet of S2 is approximately 1000 feet south west of where a 4-foot corrugated metal pipe (CMP) culvert outlet was found (**Appendix E: Figure 6**). The stream at this outlet was collected as feature Stream 3 (S3).

The beginning of S3 is impacted by unnatural straightening and multiple culvert outlets from offsite sources to the west. The 4-foot CMP culvert outlet is located slightly south, at flag S3-104. A heavy rainstorm occurred while surveying S3. The water quality of S3 was considerably degraded during and after the rain event. S3 may receive surface



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

runoff from multiple stormwater outlets. S3 was surveyed to the extent where W2 begins; after which the sinuosity of S3 becomes a more natural, meandering channel within the palustrine forested wetland.

#### 2.5 Floodplains

The plaza parcel does not fall within a 100 year floodplain based upon the Flood Insurace Rate Map Panel 140 (**Appendix E: Figure 7**). The nearest floodplain shown is approximately a mile southwest of the site surrounding Lake Mahopac.

#### 2.6 Rare, Threatened, and Endangered Species

#### 2.6.1 Background

Federal rare, threatened, and endangered (RTE) species are protected under the Endangered Species Act (ESA), as administered by the U.S. Fish and Wildlife Service (USFWS); which mandates the protection of species federally listed, as well as, their associateddhabitiates.Ititissunkawfulltoo"takkee"aalisteddspeciess.Tākeeissdetifneddaas"too harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engaggedinaatyssuchrcondduct.". Stägnifikaattmodifiktatiooroo.deggaadatioorooflistedcspecies' habitiates is considered "haami" undeer ESAA regulations. Conducting duee diligencee assessments helps to avoid impacts to these species and prevent financial or criminal penalties under the ESA.

The NYSDEC administers the Endangered and Threatened Species regulations in New York State, under 6 NYCRR Part 182. These regulations describe requests for determination of whether an activity is subject to regulation, recover and restoration plans, and the requirements for an incidental take permit (NYSDEC, 2010). When a species is listed as threatened by the federal government it becomes threatened in New York State pursuant to regulation (6 NYCRR Part 182.2[y][2]).

In compliance with the State Environmental Quality Review (SEQR) Act, VHB has conducted a review of both federal and state-listed RTE species potentially found on Site. This review has included desktop analysis, field review, and preliminary consultations with state and federal agencies.



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

A desktop review was performed to determine if the site is associated with any known New York State listed RTE species. The NYSDEC Environmental Resource Mapper was utilized for a preliminary assessment; resulting in no rare plant or rare animal location recorded on site (NYSDEC, 2014). To verify, a consultation was requested of New York Natural Heritage Program (NYNHP) for the full study area on December 3, 2015 (**Appendix J**).

A desktop review was also performed for federally listed RTE by utilizing the USFWS Information, Planning, and Conservation System (IPaC) (USFWS, 2016). The federal species list was then verified via an Official Species List was updated on January 20, 2016 (**Appendix J**).

VHB has performed a habitat assessment for Bog turtle, Indiana bat, and Northern Long-eared Bat, as detailed below.

#### 2.6.2 Bog Turtle

The Bog Turtle is known as the smallest turtle in North America, at only 4 inches long. The Bog Turtle displays a bright yellow, orange, or red patch along each side of the head. The Bog Turtle usually occurs in small populations and prefers habitats with cool, shallow, slow moving water, deep soft muck soils, and tussock-forming herbaceous vegetation. Typically, Bog Turtles are found in early successional habitats including wet meadows or open boggy areas dominated by sedges or sphagnum moss with suitable basking areas; however they have been found in forested wetlands where the hydrology and soil conditions allow. The Bog Turtles specialized habitat is lost quickly to invasive purple loosestrife (*Lythrum salicaria*) and common reed (*Phragmites australis*) invading and outgrowing the native sedges and moss.

Of the wetlands surveyed, only W2 (NYSDEC Wetland LC-32, Class II) provides potential habitat for Bog Turtle south of the study area. The portion of W2 delineated adjacent to the plaza is heavily shaded, and is dominated by dense stands of common reed. Based on the poor habitat directly adjacent to the plaza, no effect on potential Bog Turtles is anticipated.

#### 2.6.3 Indiana Bat & Northern Long-eared Bat

The Indiana Bat is a species of bats heavily impacted by human disturbance and the fungal disease? White enoses yndrome?. The Indiana bat is approximately 2 inches in



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

length, weighing 0.2 - 0.3 ounces. It is found mostly in eastern United States. In the summer, the Indiana Bat has been reported to occur in 14 counties in New York State; 6 counties during the winter. Due to the population decling 56 percent from 1960 to 2000, the USFWS listed the Indiana Bat as endangered under the ESA on March 11, 1967. Under the ESA, a threatened species is likely to become endangered in the foreseeable future, while an endangered species is currently in danger of becoming extinct.

The Northern Long-eared Bat (NLEB) is another species of bats heavily impacted by "Whiteenosecsyndromee". The Northleen Longgeared Bat is approximately 3 inches long with a 10 inch wingspan. It is predominately found in eastern and north central United States. NLEB is believed to occur in all 62 counties of New York State. As a result of continual declines in their populations, caused by white-nose syndrome, as well as, continued spread of the disease, the Northern Long-eared Bat received protection as a threatened species under the ESA on April 2, 2015, effective May 4, 2015; with the final 4(d) ruling just listed on January 14, 2016, effective February 16, 2016.

Both the Indiana Bat and Northern Long-eared Bat hibernate in caves and mines known as hibernaculum during the winter. During the summer months they utilize a wide variety of forest/wooded habitats for roosting, foraging,maternity, and travel cooridors. These species may also travel in open areas and adjacent edges of forests, such as emergent wetlands, agricultural fields, and pastures. The wooded habitats may be dense or loose aggregates of trees with variable amounts of canopy closure, where potential roost trees (i.e., live trees and/or snags of at least 3 inches in dbh that have exfoliating bark, cracks, crevices or cavities) are present (USFWS, 2015). Additionally, Indiana Bats and NLEBs have been observed roosting in man-made structures, such as buildings, barns, bridges and bat houses. The summer habitats are typically utilized from mid-May through mid-August each year.

Based upon the land cover assessment of the study area, 6.14 ac. of upland forest and 0.48 ac of forested wetland is present within the study area (**Appendix E: Figure 4**). Both of these areas contain multiple snags, dead, and decaying trees that may provide suitable roosting habitat for either bat.

A response from NYNHP on December 31, 2015 stated that the project site is within the 4 miles of a documented hibernaculum for Northern Long-eared Bat and 11 miles of a documented maternity colony for Indiana Bats. NYNHP concluded that no significant impacts to the Northern Long-eared Bat or Indiana Bat would result if large trees would not be cut down (**Appendix J**).



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

# 3

## **Proposed Project Impacts**

#### 3.1 Wetlands and Waters

The proposed project primarily exists within a footprint of previously developed areas associated with the Lake Plaza Shopping Center. No direct impacts or disturbance will occur in wetlands or streams identified near the site.

The project will include work within the regulated 100-foot upland buffer of features W1, W2, and W3, as noted below:

- W1: 6690 sf of disturbance within the buffer to replace existing parking area with proposed driveway leading to the back of proposed building, to construction of proposed wall, sewer, and drainage system.
- W2: 22,145 sf of disturbance within the buffer to resurface the existing parking lot and provide landscape islands.
- W3: 7,392 sf of disturbance to resurface the existing parking lot and provide landscape islands.

At the northeast corner of the proposed Stop & Shop, 500 sf of impervious area will be added to allow for the site improvements. However, 500 sf of the existing impervious parking lot will be removed; resulting in a net zero increase of impervious area (**Appendix D: C-04**).

Consultations with NYSDEC have been performed regarding disturbance within the 100 foot buffer of LC-32 (**Appendix L**).



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

In summary, the project will have no net increase of impervious area within the 100 foot wetland buffer. In addition, proposed landscape islands within the parking lot will decrease the impervious areas adjacent to and within the 100 foot buffers of W2 and W3.

An Erosion and Sediment Control plan (Appendix D: C-07) has been developed and a Stormwater Polution and Prevention Plan has been prepared (**Appendix N**). Based on the no net increase of impervious area within the 100 foot wetland buffer and the protections in place during construction, no impacts to the adjacent wetland or stream areas are anticpated.

#### 3.2 Rare, Threatened, and Endangered Species

Potential habitat exists for Northern Long-eared Bat, Indiana Bat, and Bog Turtle. Based upon consultation with NYNHP, no impacts to either bat species are anticpated unless large tree removal is necessary. If large trees will need to be removed, further consultation with NYSDEC and USFWS may be necessary regarding bat species.

No impacts to Bog Turtles are anticipated based on their restrictive habitat needs. The Bog Turtle, if present, would be limited to areas within NYSDEC Wetland LC-32, delineated as W2. Furthermore, no net increase in impervious area, drive aisles, or parking areas is proposed near W2.

#### 3.2 Historic and Cultural Resources

In accordance with the New York State Historic Preservation Act of 1980, VHB conducted a consultation with the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) to determine if the proposed Stop and Shop would have an effect on historic or cultural resources. OPRHP issued a letter on January 4, 2016 stating the project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places (**Appendix K**).



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

## 4

## **Summary of Conclusions**

On behalf of Lake Plaza Shopping Center, LLC, and in support of the Project, VHB conducted an environmental site assessment of wetlands, waterbodies, and RTE species during the December 2014.

VHB delineated four wetland features and three stream features within the study area. At this time, only disturbance within the 100 foot buffer of wetland areas is proposed. No net increase of impervious area within the 100 foot buffer is proposed.

VHB reviewed the site for Northern Long-eared Bat, Indiana Bat, and Bog Turtle habitat in compliance with SEQR. No direct impacts are anticipated to any of the three protected species based upon current project plans and recent consultation with NYNHP; however, if large tree removal is required, further consultations with NYSDEC and USFWS may be necessary to protect the bat species.

A consultation with OPRHP was performed in December 2015. No impacts to historic or cultural resources are anticipated.



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

## References

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitat of the United States. U.S. Fish and Wildlife Service. FWS/OBD-79/31. 103pp.
- Edinger, G. J, D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero, 2014. Ecological Communities of New York State, Second Edition: A revised and expanded edition of CaroblReschketsSEEological/CommunitiessooffNetwyYookk State. New York Natural Heritage Program, Albany, NY. 136 pp.
- Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner. 2014. The National Wetland Plant List: 2014 update of wetland ratings. Phytoneuron 2014-41: 1– 42. Published 2 April 2014.
- Natural Resources Conservation Service (NRCS), United States Department of Agriculture, 2016. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed [January 19, 2016].
- Newcomb, L., 1977. Newcoonbl:ssWilddfbweerGuidde Llittlee,BBowmnaaiddCoonpraaryy,Neww York, New York. First Ed. pp. 66.
- NYS Department of Environmental Conservation, 2014. Bog Turtle Fact Sheet. Available online at: http://www.dec.ny.gov/animals/7164.html. Accessed [April 4, 2014].
- NYS Department of Environmental Conservation, 2010. Part 182: Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern; Incidental Take Permits. Available online at: http://www.dec.ny.gov/regs/3932.html. [Accessed June 20, 2015].
- NYS Department of Environmental Conservation, 1995. Freshwater Wetland Delineation Manual Available online at http://www.dec.ny.gov/docs/wildlife\_pdf/wdelman.pdf.
- Town of Carmel, New York 1994. Freshwater Wetlands, Chapter 89 of the Town Code. Adopted by the Town Board of the Town of Carmel 12-21-1994 by L.L. No. 4-1994 (Ch. 62 of the 1972 Code).



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

- U.S. Army Corps of Engineers, 2005. Regulatory Guidance Letter. Subject: Ordinary High Water Mark Identification. No. 05-05. Available online at: http://www.usace.army.mil/cw/cecwo/reg/rglsindx.htm
- U.S. Army Corps of Engineers, 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeastern Region (Version 2.0), ed. J.S. Wakely, R.W. Lichvar, C.V. Noble. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Fish and Wildlife Service, 2009. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. http://www.fws.gov/wetlands/.
- U.S. Fish and Wildife Service, June 2011. Bog Turtle (*Clemmys muhlenbergii*) Conservation in the Northeast. Available online at: http://www.fws.gov/northeast/ecologicalservices/turtle/pdf/Bogturtle.pdf. Accessed [April 4, 2014].
- U.S. Fish and Wildlife Service, April 2015. 2015 Range-Wide Indiana Bat Summer Survey Guidelines. Available online at: http://www.fws.gov/northeast/pafo/PDF/2015IndianaBatSummerSurveyGuid elines01April2015.pdf. Accessed [April 4, 2015].
- U.S. Fish and Wildlife Service, April 2015. Northern Long-Eared Bat (Myotis septentrionalis) Fact Sheet. Available online at: http://www.fws.gov/midwest/endangered/mammals/nleb/nlebFactSheet.ht ml. Accessed [April 4, 2015].
- U.S. Fish and Wildlife Service, June 2015. Information, Planning, and Conservation System (IPaC) website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. http://www.fws.gov/IPaC/. Accessed [January 19, 2016].



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

## Appendix A

### Permit Application Form

(Copy only, original provided with cover letter)

This page left intentionally blank.

ROBERT LAGA Chairman

ANTHONY DUSOVIC Vice Chair

ROSE TROMBETTA Secretary

DAVID KLOTZLE Wetland Inspector

9

### TOWN OF CARMEL ENVIRONMENTAL CONSERVATION BOARD



60 McAlpin Avenue Mahopac, New York 10541 Tel. (845) 628-1500 - Ext. 190 www.ci.carmel.ny.us

#### BOARD MEMBERS

Edward Barnett Marc Pekowsky Vincent Turano Nicholas Fannin John Starace

#### APPLICATION FOR WETLAND PERMIT OR LETTER OF PERMISSION

Name of Applicant: Lake Plaza Shopping Center, LLC

Address of Applicant: 234 Closter Dock Road Emailpmedeiros@heidenbergproperties.com

Closter, NJ 07624

Telephone#201-768-1300 Name and Address of Owner if different from Applicant:

Mahopac Drive In Theatre, Inc., P.O. Box 738, Mahopac, NY 10541

Property Address: 983-1005 Route 6, Mahopac

Agency Submitting Application if Applicable: N/A

Tax Map # 65.10-1-45

 Location of Wetland:
 Northeast, west and southwest edge of site. See application materials submitted herewith.

 Size of Work Section & Specific Location:
 Total of 36,227 sf of disturbance within 100 foot buffers of W1, W2, W3.

 Will Project Utilize State Owned Lands? If Yes, Specify:
 No
 No

Type and extent of work (feet of new channel, yards of material to be removed, draining, dredging, filling, etc). A brief description of the regulated activity (attach supporting details).

See project narrative submitted herewith.

Proposed Start Date: 09/01/2016 Anticipated Completion Date: 09/01/2017 Fee Paid S\_\_\_\_\_1,000.00

#### **CERTIFICATION**

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief, false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. As a condition to the issuance of a permit, the applicant accepts full legal responsibility for all damage, direct or indirect, or whatever nature, and by whomever suffered, arising out of the project described here-in and agrees to indemnify and save harmless the Town of Carmel from suits, actions, damages and costs of every name and description resulting from the said project.

1/30/2014

SIGNATURE Robert Heidenberg, Authorized Signatory This page left intentionally blank.



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

## Appendix B

**Property Deed** 

This page left intentionally blank.

A CONTRACTOR OF A CONTRACTOR OF

LUD

1

Scholard K 1, B, E, D, E Mary ANN Berginn und Bale Bund wich Covenant igantet Reanter i Bern-badivaliether Corporation (Single Meet) . 5 CONSULT YOUR LAWYER BEFORE EIGNING THIS INSTRUMENT-THIS INSTRUMENT SHOULD BE USED BY LAWYERS ONLY. 15. 22. 1/4 THIS INDENTURE, made the 16th day of February ' , number hundred and seventy-seven BETWEEN ALVARD CASAGRANDE, also known as Elvaro Casagrande, residing at no street number, Bucksollow Acad, Mahopac, Town of Carmel, Putnam County, New York, indivi-dually and as executor of the Estate of Louis J. Casagrande, deceased, "party of the first part, and MAHOPAC DRIVE IN THEATRE, IMC., a domestic corporation of the State of Hew York, having its principal place of business at U.S. Route 6, Mahopac, New York party of the second part, WITNESSETH, that the party of the first part, in consideration of ten dollars and other valuable consideration paid by the party of the second part, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever, ALL but errain plut, piece or party of the record part interer, ALL but errain plut, piece or parted of bad, with the buildings and implementation thereon eracted, sibusis, juing and being instant at Lake Casse, Mahopac, Town of Carmel, Putnam County, New York, being more july shown and described on a certain same entitled "Subdivision Map of Lake Casse 'Sik', Town of Carmel, Putnam County, New York', Filed in the office of the Clark of the County of Putnam, New York, on September 30, 1968, Map No. 724-J. and known thereon as Parcel B and Parcel L.  ${\rm TOGETHCR}$  with the right to use Lake Casse for boating, bothing and fishing in common with others. YOA, KTHER with all right, infer and interest, if any, of the party of the first part in and to any asterns and math algorithm, the Marc theoretical premises to the center lines thereaf: TOGETHER with the appointenances and all the violate and right of the party of the first part in and to min premises; TO HAVE AND TO [III.]) Reprises Retric particle unto the party of the second part, the heirs or successors and any the party of the second part, the heirs or successors and any the party of the second part. AND the party on the first part concentrat that the party of the first part has not done or suffered onlything whereby the sold predices have been executivered in any way whereby, except as aftered onlything and the party of the fost party in compliance with Section 13 of the Lieu, how nowman that the party of the first part will relate the consideration for this result parts and the institution reserves such combined evaluations at this first party in concentration for this result parts and the major evaluation and will apply the source first on the restaurum of the control the impervised approximation of the same for any other purpose. The word "party" shall be runstructed as if it read "parties" whenever the source of this indenture so requires. IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above welsten. IN PRESENCE OF: Alvaro Casagrande Alm. last LIBER 741 1 375 ----1.00 - 1 - 0 - 0 INCH OPERAPE REFLEE COPYERS BOARD

	* 6
22	
or any or any vork, county of Putnam	to the flar clay of 19 before me
personally came	
so my known to be the individual - described to soft wh	to me knows to be the individual described in and who
he me known is to me goutnant and acknowledged the	excepted the same
fim hatti	
ցուրությունը՝ Տորությունը Իրեւությունը՝ Տորությունը Ծրունչերը՝ հայուրությունը Ծրունչերը՝ Հարությունը 1977	
eem (survey story) and read	
STATI OF NEW YORK, COUNTY OF	IT TAN OF NEW YORK, COUNTY OF
(in the day of [2] , below is personally cause	and City Min which we
personang cano to me konwn, who, brang Ly me duly sworn, did depose er av diet – he results at No	I towards row with the state of the foregoing pouroment, with allow an personally asymptotic presentation of the state of
that here the	that he knows
, the conjunction description of the foregoing the foregoi	to to out of an and solve executed the forcenanc endermound ;
in and which executes for the group distributions during largues for scal of said conjustion, that the scal allow () could notemate version execute weak; that it was afford by indict of the brand of directions of scale traper-	so that he, and subscribing isiliess, was prosent and saw
tion, and that he signed ho make thereto by like unit	er at the same time subscribed is name as soluties discreto
	RECEIVED
	REAL LON 11
	** FE 11 1 6 1977 TRAGET
Burgain auft Bale Berd	SILLION A PULISION COUNTY
ATHET MANAGER MANY GRANNERS WERE	NISE County of
ALVARD CASAGRANDE	AREAXING IONN of Carmel, County of Putnam
	4.4.4.4.
•	A LIVEL A REYURN BY NAIL TO
eranzare form br brin sere sparse or e fire ambienrables	Ryder, Costello, Miller & Garcia Box
Anardaded Ar SECURITY FIFTE AND DUAR INTY COMPANY	
Carterines Dista	Zış Ne
1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
PUTANT FEB 16	Recorded in the tilerk's Office of
Concess on 2018/07 77 FEB1 77 FEB1	the County of Putnam on the 16 day of February 1977
	AT Y HOURS AND / MIDLINES OF THE
TT FEB 16	in Book No. 744 In 6444
2	Tot of the
	buland marks
Ē.	Clork

BOLLONG BE RAME AVOID VI AND BOLD

.

1



Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

## Appendix C

### Owner's Consentt

(Copy only, original provided with cover letter)

This page left intentionally blank.

### Mahopac Drive-In Theatre Inc. 40 Shallow Stream Road Carmel, New York 10512

January 21, 2016

Hon. Robert Laga, Chairman and Members of the Environmental Conservation Board Town of Carmel 60 McAlpin Avenue Mahopac, New York 10541

> Application of Lake Plaza Shopping Center, LLC for a Wetland Permit for the Mahopac Plaza Shopping Center 983-1005 Route 6, Route 6 and Baldwin Lane Tax Identification Number: Section 65.10, Block 1, Lot 45 Owner's Authorization

Dear Chairman Laga and Members of the Board:

Re:

Mahopac Drive-In Theatre, Inc. is the owner of the property that is the subject of the abovereferenced application. As owner, Mahopac Drive-In Theatre, Inc. hereby authorizes Lake Plaza Shopping Center, LLC ("Lake Plaza"), the ground lessee of the subject property, to apply to the Town of Carmel Environmental Conservation Board for a wetland permit and other related approvals in connection with the proposed grocery store expansion and related improvements on the subject property. We further authorize Lake Plaza to take such other actions, appear before and seek approval from such other Town bodies and officers of the Town of Carmel, including but not limited to, the Town's Zoning Board of Appeals and Planning Board, as is necessary or desirable in connection with seeking such approval. Finally, we consent to Lake Plaza's application(s) with the understanding and on the condition that Lake Plaza will be responsible for all costs and expenses associated with the application and the Town's review thereof.

Very truly yours,

Mahopac Drive-In Theatre, Inc.

John D. Gilmore, President

Sworn to before me this Ald day of OX n 2016.

SUSAN J. NUNZIATA Notary Public, State of New York Registration no. 01NU6078143 Qualified in Putnam County Commission Expires July 22, 20

1.1



Wetland Permit Application | January 28, 2016

Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

# Appendix D

# Please see separate attachment for the Site Plans: Sheets C-00 through C-20

## Site Plan Approver Date Issued Latest Issue

# Proposed Step & Shop

483 4008 Reute A Route 5 & Baldwin Lanel Lown of Carmel Makapais Supram County, New York 1954

> Owner/Applicant Owner/Applicant Lake Plaza Shopping Center, LLC Lake Plaza Shopping Center, LLC Heidenberg Properties Group 244 Chester Door Chest Coster, NJ 07624

Tax Parcels (Map-Block-Lot) Tax Parcels (Map-Block-Lot) 65.10-1-45 65.10-1-46 65.10-1-46



نەت ئىس		
No.	Drawing Title	Latest Issue
- C.O.	Legend And General Notes	December 31, 2015
C-02	Abutter's List and Map	December 31, 2015
6-03	Existing Conditions Plan	December 31, 2015
C-04	Castron Counterrais Plan	December 31, 2015
6-05	Grading and Drainage Plan	Becember 31, 2015
C-06	Gradua and Drainage Plan Utility Plan	December 31, 2015
C-07	Fresion and Sedument Control Plan	Becember 31, 2015
6-08	Delivery Truck and Pedestrian Maneuvering Plan	Becember 31, 2015
6-09	Celicery Listric and Pedestson Maneuvering Plan Fire Truck Maneuvering Plan	December 31, 2015
6-69.1	Eine Truck, Maneuvering Plan Passenger Car Maneuvering Plan	December 31, 2015
C-10	Bassanger Car Maneuvennd Plan Site Details 1	December 31, 2015
649	Site Details 2	December 31, 2015
C-12	Site Details 2 Site Details 3	December 31, 2013
C-13	Site Details 3 Site Details 4	December 31, 2015
C-14	Site Details 4 Site Details 5	December 31, 2015
C-14 C-15	Site Lighting Photometric Plan	December 31, 2015
C-15	Site Lighting Photometric Plan Site Lighting Plan Details 1	December 31, 2015 December 31, 2015
	Site Lighting Plan Details 1 Site Lighting Plan Details 1	
2-17	Strie Leibhnig Plan Details 1 Site Lighting Plan Details 2 Site Fridding Day Details 2	December 31, 2015
C-18	Ste Frantum Plan Defails 2 Planting Plan and Notes Plantage Plan and Notes	December 31, 2015
<b>C-19</b>	Planting Plan and Notes Planting Details	December 31, 2015
C-20	Sight Line Triangle Plan	December 31, 2015
C-20	Sight Une Triangle Plan	December 32, 2015



Surveyor Insite Engineering, Surveying & Landscape Withmetoure Probiostraction and Interfutee Procamed New York, 10512 Camed New York, 10512



Arm/\WhiteFinites\41920.00\arm(\id\Piameet\41928.00\_LC.dvt

	Le	gend		
Exist. Prop.		Exist.	Prop.	
	PROPERTY LINE		1.5.16	CONCRETE
	PROJECT UNIT UNE		1 1	HEAVY DUTY PAVEMENT
	REAT-OF-WAY/PROPERTY LINE			RPRAP
	EASLINEN."		6.00	CONSTRUCTION ENTRANCE
	PARKING SETBACK		PBTCs	TOP OF CUPS ELEVATION
10+00	BASELING		20.05 86.4	BOTTOM OF CURB ELEVATION
	EDISTRUCTION LAYINT		132 75 #	SPOT ELEVATION
the second	ZORING VINE		#50 TW	TOP & BOTTOM OF WHILE ELEVATION
	TOWN LINE	3	•	BORING LOCATION
			₽ ₩	TEST IP1 LOCATION
	LIMIT OF DISTURBANCE	~	•	VONTIORING WELL
	NETLAND LINE WITH FLAG FLOCOPLAN		w	UNDERBRATH
			12.0 -	ORAN
87	HORSERIAG LAND SURJECT TO FLODDING	N 1	5760-	ROOF DRAIN
	NETLAND BUFFOF ZONE			52.96.7
-102	NO DISTURB ZONE		<u>n</u>	FORCE MAIN
	200 RIVERFRONT AREA			DVERHEAD WIRE
				MATER .
	GRAVEL ROAD EIGE OF PAVEMENT			THE PROTECTION
	BITUNHOUS DERM			DOMESTIC WATER
	BITABLOUS CLEB		_ 9	GAS D.DCTRIC
00	CONCRETE CURE			STEAN
58	CUPB AND QUITEP			TELEPHONE
605	EXTRUDED CONDRETE CURE		n	FIRE ALAFM
800	MONORITING CONTRECTLY OURD		сати	CARKE TV
- 209	PRECAST CONC. OURS		_	
	SLOPED GRAN, EDGING	- 5		CATCH BASIN
	VERT, CRAN CURE		_	DOUGLE CATCH BASH GUITER INLET
	limit of loved type			DRAW WANNEL
	SANCUI			DROW WANHOLL TRENDL DRAN
Ļ				PLUE OR CAP
	RULDING			CLEANED T
kins	BUILDING EXTRANCE		•	FLARED CHIL SECTION
1 ]eu	FOTTAND DOCK		$\sim$	HEADWAL
D	DUMPSTER PAD			SEWER WARRING
<u>ت</u>	SCH SILK FAU			20,00,H WANHUL!
-	DRUBLE SIGN	1	£	CUPB STOP & BOX
	COLOR DAT		1	WATER HALVE & BOX
	STOLE GUNGORIAL		10	"APPING SLEEVE, VALVE IN BOX
	WOOD GUARDRAIL		* R *	STAMESE CORRECTION
			<b>.</b>	FIRE NYTRANT
	PATH		- -	WATER METER POST INDICATOR VALVE
~~~~~	THE LINE.		•	POST INDICATOR VALVE
	WARE FENCE	_		RAS GAT
	STOCKADE FENGE		5 de	GAS GATE GAS METER
	STOCKAR FENGE STONE WATI,		_	
	RETAINING WALL		(Carl	ELECTRIC MANNOLE
	STREAM / POND / WARE? COURSE		Da E	ELECTRIC METER
_	OFTENTION BASIN			LYOHT POLE
			• <sup>ne</sup>	DITENON, KARROLT
-x x	SUT FENCE			TRANSFORMER PAD
40 144 DA	SET SOCK / STRAW WATLE			UTIONY POLE
	MARCINE CONTINUES	•		OUT POLE
	WARE CONTOUR		1	OUT HIRE & ANCHOR
		-	Hell KU	HAND HOLE
0	"ARKING COUNT		5	PAL BOX
- @	COMPACT PARKING STALLS		hilma	
	DOUBLE YELLOW INC		hine	WAIDIUN(
	stop line			
CUNITANIA	CROCOMALK			
₽	ACCESSIBLE CUPB RAMP			
ě.	actessees parking			
7	VAN - ACCESSIBLE PARKING			

	Abbreviations
General	L
ABAN	10-000
ACR	ACCESSIBLE CURB RAMP
ADU APPROK	ADJUST APPROXMATE
BIT	BRUMINOUS
85	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE UND
CONC	CONCRETE
DYCL	DOUBLE YSUNGW CENTER LINE Elevation
ELEV	ELEVATION
EXIST	EXISTING
¢ DN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
ORAN GTD	GRANITE GRADE TO DRAIN
LA	LANDSCAPE AREA
106	LIMIT OF DISTURBANCE
VAX	MARMUM
¥1N	MINIMUM
VEP	NECHAN CAL/ELECTRICAL/PLUMBING NOT IN CONTRACT
NIC NIS	NOT TO SCALE
PFRF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	PETAIN
RAD	REMOVE AND DISPOSE REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SCILD WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
<u>Utility</u>	
CB	CATCH BASIN
CI	CURB INLET
co	ODRRUGATED NETAL PIPE OLEANOUT
008	DOUBLE CATCH BASIN
DET	DETENTION BASIN
DIP	DUCTLE IRON PIPE
DMH	DRAIN MANHOLE
CIP COND	CAST IRON PIPE
DIP	DUCTLE IRON PIPE
18 A	FLARED END SECTION
PI .	FIFLD INLET
FW	FORCE WAIN
Fac	FRAME AND GRATE
61	FRAME AND COVER SUTTER INLET
GT	GREASE TRAP
HOPE	HIGH DENSITY POLYETHYLENE PIPE
нч	HANDHOLE
н₩	HEADWALL
HYD WV	HYDRANT IN ÆRT ELEVATION
Ja	INVERT ELEVATION
JP .	LIGHT POLE
NES	METAL END SECTION
PW#	PAVED WATER WAY
PVC	POLIVIN YLCHLORIDE IP 92
PIV RCP	POST IND/CATOR VALVE REINFORCED CONCRETE PIPE
RD	ROOF ORAIN
Re	RIM ELEVATION
sco	SANITARY CLEANOUT
SMH	SEWER MANHOLE
191	TAPPING SLEEVE, VALVE AND BOX

- TARPING SLEEVE, VALVE AND BOX 14.0
- 05 UNDERGROUND
- UTUITY POLS

General

- CONTRACTOR SHALL NOTIFY THE SAFEY MY (1-800-762-7952) AT VEAST 72 HOURS BEFORE THE START OF ANY CONSIDERCION ACTIVITY.
- CONTRACTOR SHALL BE RESTONSIBLE FOR SHE SECURITY AND LOB SAFETY. CONSTRUCTION ACTIVITES SHALL BE IN ACCOMPANCE WITH DSHA STANDARDS AND LICKA RECOMPLICITY.
- ACCESSED QUILS, PARKING SPALES, PARKS, SOCHALIS, AM MALMANS, SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL ANERGANS WITH BESAULTIES ACE AND MONISTAT, AND LOCAL LANS AND FELLATIONS (INACHARY A MEMORY STRUCTURE)
- ANGAS DESTABLED DURING COASTRUCTION AND NOT RESTORED WITH IMPERVOUS SURFACES (BALDHOS, PANEMENTS, WALVES, ETC.) SHALL RECEIVE & INFORM AND SEED
- 5 WITHIN THE LIMITS OF THE BLICONE FEORPHY, THE SHE CONTRACTOR SHALL PERFORM EARTHMERE OPTIGATIONS INCLUDED UP 13 SUBCRISE ELEWARDER.
- WORK WITHIN THE LOCAL POINTS-DF-WAY SHALL CONFURM TO LOCAL MOREOPIN, STANDARDS, HORY WITHIN STANDARD SYNCHICATORY FOR HIGHING AND THE LARGET CONFORM THE STATE HORMAY DEPARTMENTS STANDARD SYNCHICATORY FOR HIGHING AND HIMLES.
- LOON AND CONTRACT, CONTRACTOR SHULL MAKE MICESSARY CONSTRUCTOR NORFLAMORS AND APPLY TOR AND COLLAR ACCESSARY FEMALE, ANY TEES, AND FACE INVEST. ACCESSANT CONTRACT, AND FACE ACCESSANT OPENALING STATUS AND ACCESSANT ACTION AND ACCESSANT ACCESSANT ACCESSANT ACCESSANT OPENALING STATUS AND FACE AND FACE ACCESSANT ACCESSANT ACCESSANT ACCESSANT ACCESSANT ACCESSANT OPENALING STATUS AND FACE AND FACE ACCESSANT A
- B. TRAFFIC SIZEARE AND PARENERT MARGINES SHALL CONFORM TO THE MARANE OF UNITORY TRAFFIC DIMITION (CONSTS)
- B AREAS DUISDE THE LIMITS OF PROMISED WORK DISTURBED BY THE CONTRACTOR'S OPDIATIONS RIALL RE RISTURED BY THE CONTRACTOR NO THEN DRIGHTL CONDITION AT THE CONTRACTOR'S DIPLACE.
- In the least that bijetetid containants for, goodennity, and ones high and decomposition of the second termination and costing-term activities based on the all allocation of the second of the sec
- CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM CONTRACTOR SHALL BE PERSONABLE FOR CLEANUP, REPARTS AND CONDECTIVE ACTION IF SUCH DESURS.
- 12. GARAGE RESULTING FROM DORSTRUCTION LOADS SHALL BE REPARED BY THE EDATRACTOR AT NO ADDITIONAL DOGS TO DORVER.
- 13. CONTRACTOR SHALL CONTROL STORMINATER RENOFF BUPPIC CONSTRUCTION TO PREVENT ADVANCE IMPACTS 10 SITE STR. AREAS, AND SHALL DR. RESPONDENCE NO REPAIR PESCHING DIMAGES, Y. MIX, AI NO COST TO DIMAGES.
- In the project disturgs work than one are or land and tails when the proce construction that has in them (COP) reasons and fex awards that, if the tail to the Staff or Canarakana Definition to the AL or produce of match with the process down and a submatch reaction registerior plant is additionable with the process down the construction shall be additioned to the Canarakana to Canarakana registerior plant is additionable with the process down the construction shall be additioned to the Canarakana registerior plant is additionable with the CPA and the construction shall be additioned to the Canarakana to the construction shall be additioned to the construction shall be added to the construction shall be a

#### Dulities

Demolation

- verses, and patients Lutter is cross to construct while the description of the flower developed of the flower developed of the flower developed of the devel
- SET CATCH BASH RWS, AND AVEN'S OF SEVERS, MANNES, AND DITCHES IN ACCORDANCE MITH LUCYATORS OF THE CRADING AND UTURY IN ANS
- Rim Elevations For Draw and Sende Manholes, Water Valve Oderks, Das Gates, Electric And-Telepache Paul Boots, and Manholes, and Dyner Sich Teles, and Approximate and Shull ne selected at a follows.
- A RAVINITY AND CONCRETE SIMEARTS. IT USA B. ALL SUPPRES HUNG ACCESSIBLE ROUTES. ITUSH
- C. LANDSCAFE, LOAM AND FIELD, JAID OTHER EARTH SURFACE AND AS: ONE THEM ADDIVE SURFACIANDING ANTA AND TAPLE EARTH "O THE MY LEWYING
- . CONTRACTOR SIMIL WARD ARRANGEMENTS FOR AND SMALL BE RESPONSED FOR PAYING FLES FOR POLL RESOLVING AND FOR HER ALLIANTER AND ADJASTMONT OF GAS ELEGING. TILLPHINE, FRE WARD, AND ANY OTHER PRANTE LIVELING, HER THER MAN, BY CONTRACTOR BY THE UNDER CONTANT
- 2. LITUTY MAY WATCHALS SHULL BE AS FOLLOWS, JAKING OTHERWISE WITTO DA THE PLAN
- A WATER PERS SHALL BE DUGTLE BOR PER (D.P). GLASS 52
- B. SANTARY SEWER RIVES SHALL BE PELYMENT CHORME (PAC) SEWER RIPS, SOR 25 C. STORM DRAMADE PAPES SHALL BE HOPE AND REP. TYPE 1.
- D. FOR INSTALLATION AND WATERING'S SHALL COMPLY WITH THE STATE PLANNING CODE WHERE APPLYCANI COMBRACTOR SHALL COORDINATE WITH LODG, PLANNING MERICTOR PSON TO BE DRAWING MERIC.
- Али интерната с конструкти интернатор допустращатии длинетора "Цинетора " склада и полнаката сперата на вързата сперата на или длинетора. Ца пода на ногидника на склада и пода пода се до да и пода пода пода се пода на пода на негота пода се пода пода се до да се пода на пода на пода на пода пода на сладата се вързата пода пода пода на пода на пода на пода се сперата се вързата на пода на пода на пода на пода на дина с сладата се вързата на пода на пода на пода на дина с сладата се вързата на пода на пода на пода на пода на дина с сладата на пода на пода на пода на пода на дина с сладата на пода на пода на пода на пода на дина с сладата на пода на пода на пода на пода на дина с сладата на пода на пода на пода на дина с сладата на пода на пода на пода на дина с сладата на пода на пода на пода на дина с сладата на пода на пода на пода на дина на дина на пода на дина на дин
- B. DEMITRACION SHALL EXCAVATE AND BACKFALL TRENDARS FOR GAS IN ACCORDANCE WITH BAS COMPANY'S RECOMPLICATION.
- 10. ALL DRAINEZ 44D SAMEARY STRUCTURE INTERIOR DWARTERS (# 1405) SHALL BE DETERMINED BY THE MARKACHTER BASED IN THE PRE COMPLEXATIONS SHORE ON BHEST PLANS AND LICLU. INANCTAL STRUCTURE, COM WARKEDS INVEL AND STREET IN COMPLEX AND CREATER, DWARMS COMPLEXE SHALL BE TH STRUCTURE. COM WARKEDS INVEL AND STREET IN COMPLEX SHORE ON CREATER, DWARMS COMPLEXE SHALL BE TH STRUCTURE. COM WARKEDS INVEL AND STREET IN COMPLEXE SHORE ON CREATER, DWARMS COMPLEXE SHALL BE THE STRUCTURE. COM WARKEDS INVEL AND STREET IN COMPLEXE SHORE ON CREATER, DWARMS COMPLEXE SHORE ON CREATER, DWARMS COMPLEXES INVEL AND CREATER, DWARMS COMPLEXES INVELOR CREATER, DWARMS COMPLEXES INVEL AND CREATER, DWARMS COMPLEXES INVELOR CREATER, DWARMS COMPLEXES INVEL DWARMS STANC Loyout and Materiak
- DARCHSIGHTS ARE FROM THE FACE OF CURB, FACE OF BLASHIG, FACE OF MALL AND CONTER LARE OF PARTNERS MATTER.
- 2 SLEAR RADIE ARE 3 FEET UNUSSS DTHERMISE INDIED
- QUERNE SHALL BE PRECASE CONTRETE CURE (PCC) AND MONITIME CONDITIE CONCILET. (NEC) WHILE THE STE UNLESS DIFFERMENT INTERFERENCE
- Existing Conditions Information. SEC ACCUMENTATION DRAMMES FOR EASES FOR EASES BARDING INVESTIGATES AND DETAILS CONTROLOUS TO THE BERINGS, REQUERY: BREWING, RAMES, DULING (VIEWARDS, STAMMARS, UTLAY PRETRATION, CONCRETY GOOD PAGE, COMPACIDE PAG, LOADING DOORS, BULARTS, EG. SASE PLAN. "WE DISTANG CONDITIONS SHOWLON DRIVE PLANS ARE BASED UPON AN ATTA/ACSN (AND THE SURVEY REPARED INSTE FROM(IRNE, SURVEYING, AND LANDSLAFF AND TFOLING F.C., DATEO YOLDING IN 2011
- . PROFESSED BESINES AND ANY EXISTING PROPERTY LINE HOMANCHARDIN OFSIL/RIED DUPING CONSTRUCTION SHALL BE SET OF PETET BY A PROFESSIONAL LYSINGE SUBJECTOR.
- INSERVICES FOR A REAL AND A REAL AND A REAL AND A REAL AND ANY A REAL AN PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL WHEN EXISTING PARKWARE LEVATIONS AT HYDERACE RETH PROPERTY ANTIMATING, AND EXISTING PARKWARE LEVATIONS ASSAULTING TO DRAMADE OUTLETS TO ASSING PROPER TRANSITIONS IN ARCH DISTORME AND PROPERTIE ASSAULTINGS.
  - . TOPOGRAFHY LEWHIDYS AND INSIDE OF YORTH ANDROWN VENICAL BATTAN 1986 AND IS BASED UPON CP'S DESERVATIONS TAKEN EVENIS THE COURSE OF THIS SLIVEY AND REDUCED USING THE HTS ODES HERMON. 4 VORDINTIAL INTORNATION ANSID ON THE NEW YORK COMPONENT, SYSTEM, UNIT ZONE (HARD NO
    - Document Use
- CONTRACTOR SWILL PERIOR AND DEPOSE OF LOSTING NAMINOS SUBRICE TEXTINGS WHEN THE LINE OF NOR HALIDANE TANDHOS, STALETINGS, PARAMENTS, SAKES, GRADING, TOXIS, LUTLIY FORES, SAKES, TOX HESTS, KARESTER, STALETING, REVART, AND TOX A DEPOND, OF LOSTING TOXIS, LUTLIY FORES, SAKES, TOX HESTS, KARESTER, SALETING, REVART, AND TOX A DEPOND, OF LOSTING TAXIS, TOXANDAS, AND INSCRALE SALETING, REVART, AND TOX A DEPOND, OF LO FILE OF COM THE PROTOTO BILDING FORTHMIN MEXING ALTERNE COMMER. EXSTING LITLINES SHALL BE TERMINARD, UNLESS OF ERMISE NOTED, IN CONTINUANCE ATHIE LOCAL, STATE AND REVANDED, UTLINY COMPANY STANDARD SPECIFICATIONS AND DETLASS, THE CONTRACTOR SHALL COORDINATE CUTITY SERVER S SEQURATES IN WITH THIT IN THAT MATERIANALIZES.
- . Compreading Shall displose of denoutron dedays in accompance with applicable federal. State and Local atoms, ordenings, and Statutes,
- CONTRACTOR SHALL NOT RELY SOLETY ON EXCENTING VERSIONS OF PLANS, SPECKDARDAS, AND DATA PLES THAT ARE DISTAND FROM THE DESCHARDER, BUT SHALL VERY LOCATION OF PREASO FLATMER IN ACCOMPANY, WITH DE PAPEL DOING OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS. THE COLUMPS LIMPS CONTROL IN THE FLANS IS NEEDEDS TO JUST HE CONTRACTING DURING THE GROUPS AND CONTRACTING THE ADDRESS AND A THIT HETEROD TO LOTE LUMI AND CONTRACTING DURING THE GROUPS INTO CONTRACTING THE ADDRESS AND A THIT HETEROD TO LOTE LUMI AND CONTRACTING THE ADDRESS. CONTRACTING THE DURING THE CONTRACTING THE ADDRESS AND ADDRESS.
- LALD GREATE STOTELLO FORME DE ME ALL OF THE PALL OF THE STOTELLES AND ALL OF THE STOTELLES AND A

#### Notes:

#### Presion Control DETAIL ALL INCOLSSARY APPROVALS AND APPLICABLE PERMIS

- A PRE-ODSPECTOR WITH BE SHULL BY ALL BEACHTS IN THE CONTRACTS, OHNO, DEADEL, AT the attract the contract of the second s
- THE EROSON MAD SEDALAT CONTROLS SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIVECTION OF THE INVERTED AND/OD THE DESCRIPTED VILLAGE REPRESENTATIVE AS RECEISED THE BY CONVERIE SET. EDIDING-S
- ALL DEWATCHING WAS'L WARRY SHOLL DE OSCHARDED IN À MANNER INNEN INTENTES THE DISCOLORATION De the rescanne materix, fin, sin signad de vier follan de distributions utter, and banding gaterials in Derre that hung, de the ganer, eviers are landos de materialistes.

andszane árchilect

White Plains, NY 10606

50 Main Street Suite 360

p: 914 457,6600 1 914 761 3759

Tax Parcels

65 10-1-45 55 10-1-46

Proposed Stop & Shop

983-1005 Route 6 Town of Carmel, Mahopac, New York, 10541

No. 1000 Array

Links Links

Site Plan Approval November 30, 201

Legend and General Notes

41929.00

Not Approved for Construction

Micheol W. Aunghor

- PROF TO STAPTED ANY DIMENSION ON THE SITE, THE CONTRACTOR SHALL MOTEY APPROVENT. ACCOUNT AND THE STAPS HER AS BEINGTO IN ITERAL, SITUAL APPROVENT ACCOUNTING INVESTIGATION IN THE PLACE HIGH AS BEINGTIO IN ITERAL, SITUAL APPROVENT ACCOUNTING PLATEMENT TO THE PROLET.
- enviration shall respect and non-fam respon control measures and renove somewing technology. In a respect rass and defines of somewing with filling area such that they do not enclosed. Drive reamage structures and indicate artis.
- CONTRACTOR SHALL BE ONLY RESPONSE TO CONTRACTON RUSH THAT ECONTRACTON SHALL BE NEED BY MATERY WARRY, WHO, OR SHIELD PERSON PROTECTOR ARCAS, WHETHER SUCH STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY, WHO, OR SHIELD PERSON STIDMANDATION IS CAUSED BY MATERY AND STIDMANDATION STIDMANDATION IS CAUSED BY MATERY AND STIDMANDATION STIDMATERY AND STIDMANDATION STIDMATERY AND STIDMATERY
- CONTRACTOR SHALL PERFORM CONSTRUCTION SECREMOND SUCH INAT FARTH MATERIALS ARE LEPOSED FOR A MANAGINA OF THE DEPORT THEY ARE CONSTRUCTION SECREMOND SUCH INAT FARTH MATERIALS ARE LEPOSED FOR A MANAGINA OF THE DEPORT THEY ARE CONSTRUCTION SECREMOND SUCH INAT FARTH MATERIALS ARE LEPOSED FOR A MANAGINA OF THE DEPORT THEY ARE CONSTRUCTION SECREMOND SUCH INAT FARTH MATERIALS ARE LEPOSED FOR A MANAGINA OF THE DEPORT THEY ARE CONSTRUCTION SECREMOND SUCH INAT FARTH MATERIALS ARE LEPOSED FOR A MANAGINAL OF THE DEPORT THEY ARE CONSTRUCTION SECREMOND.
- R. ALL SOL TRESSON AND STORENT CONTROL PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH KEP YORK STANDARDS AND SPECIFICATIONS FOR EPOSION AND SEMILIN" CONTROL (MYSIC), AND 2005).
- ID. ALL ENTSIDE AND SEDMENT CONTROL MEASURES SHALL BE MENTAHED UNTIL COMPLETON OF CONSTRUCTION AND SHALL BE IN ACCORDANCE WITH THE INSERC REQUIREMENTS.
- THE TIMM OF CAMPE, MYSCE OF THE STIE ENGINEER MAY RECLEST ADDITIONAL MEASURES TO UNMADE THE POTENTIAL FOR OWNER OR OTHER'S CROSEN PROBLEMS THAT WAY DECORE DRIVE CONSTRUCTION. THE CONTINUETED IS REPORTED FOR COMPANY THAT IS A MARKETS.
- Contraction of a magnetized contraction to the magnetized and magnetized by a strategies of solver and provide the magnetized by the magne
- ANY GRACED AREAS NOT SUBJECT TO FURTHER DISTURBANCE ON CONSTRUCTION TRAFFIC SHALL, WITHIN 10 DAYS OF TIME CRADING, RECENCE PERMANNEL VICETATIVE CAREA BI COMMANDON WITH SATABLE MARCH AS PAYS IN 6 STRUCTURED.
- 14. OUT DE ALL SLOPES STEEPER THAN 3-1 SHALL DE STABUIZED HANEDIATELY ATRES DAARME
- IS THE SHALL AT ALL TAKE OF GRAVES AND WATHARD S.C. THE SALL STORMART RUNOF IS DESCRIPTION AND SCHWART CONTROL FACTORES.
- 18. ALL STOPH DRAMAGE OUTLETS STALL BE STADLED. AS REDURED. REFORE THE DISCHARGE PRINTS REDUKE GREATIONN.
- CONSTRUCTION FEMORES SHALL BE USED TO PROTECT EXISTING TREES TO REMAY, METLANDS AND DTHEP SUMETING AREAS, REFER TO BEE PROTECTION NOTES ON LONGSLAVE, FLAM FOR ADDITIONAL INFORMATION
- 15. If the any reason the construction is include for extended persons, the constractor stall, stability the solution antipul by inconducto or other means, to the satisfaction of the converse for hill areas occord on view for non-
- IR STORM WATCH FROM DISTURSED AREAS MAST BE PASSED THROUGH AN APPROVED CONTROL DEVICE BEFORE BONG DISCHARZED BEFORE DISTURSED AREAS ON DISCHARGED INTO INCLUS OF DIFCH DIAMAGE SYSTEMS.
- D INST CONTROL WATER DAWL BE APPLIED BY SYMMALTE DA BATER TRUCK LUNNE CAMPAG OFFICE MANAGE STEMATH TRANSPORT AND MARKING ACCEPTABLE AN GULITY CONDITIONS, MPETIMAE TRANSPORT SYNLL BE GOAR & RECTOR TRANSPORT AND MARKEN AN EXTRAPLE.
- In the strict substance of the Standard composition of the strict substantial of the comparison of the strict substantial s
- 22. 1-6. ODVITAGIOR SHALL REPARE OR REPLACE DAMAGED EROSON COVERD, DEVICES INVERNATELY, AND IN NO CASE, MORE SHAN TRANSF FOR (24) HOLPS ATTER OFSERVAS SECH DEPICEMENTS
- 23. THE CONTRACTOR SHALL BE PREMARED TO IMPLEMENT INTERM DRANING CONTROL SAMD EROSEN DONTROL MEASURES AS MAY BE RECESSARY DURING THE COLLESS OF DRASTRUCTION
- N THE DON'TRACTOR SHALL MARE AVARABLE DAN'TE ALL FOLDWARKT, MATERIALS AND LARGE NECESSARY TO PERIODAL EMPERATOR RECORD CONTROL AND DRAWARE MERCINE ALS WHEN YEAR (4) HEARS OF ARE INSTRUCE ANTROPOLY STUDIED.
- 25. ML SCE PRODUKTING OF STREAM REASERS MALE MANAGED BY DE CONTRACTOR VITE FAIN ACCEPTING OF MS STEE WORK BY NO AMONG INFORMATION OF INAL ACCEPTING, THE OWNER WILL ASSAULT REPORTED IN THE CONTRACT ANNUTATION OF PRODUCTS DOL FROM SEMANT CONTROL (#4398).
- 25. PHASES OF CONSTRUCTION INCLUDING GLEARING AND GRURRING, PRELIMINARY SPE PREPARATION, UTULT INSTALLATION, INSTALLAMART SPACING, ETC., REGURE, INC. RETURNING ASJRES TO BE IN PLACE.
- 27. NO CONSTRUCTION ACTIVITIES OF ANY RAD SHOULD OCCUR WITHIN THE LIMITS OF THE REVIEWED AREAS NOLLIMINE, BUT NOT LAITED TO CARANCE, DEVANTION, STOCKTURE OF WATHING, STRUCTURE OF CONSTRUCTION NOMENTY, VINAET PARAMEM, WOMENT OF WATHING OF WATHING, OF OUNDAWD OF CONSTRUCTION CORRECT, VINAET PARAMEM, WOMENT OF WATHING OF WATHING, OF OUNDAWD OF
- CONTRACTOR SMALL REFER TO THE ERSTRICH DETAILS FOR THE PROFEDENCE MEASURES PROPOSED.
- 28. CONTRACTOR SHALL BE RESPONSED, FOR COMPLANCE WITH ALL SEDMENT AND EROSON CONTROL REACTORS. Inf. SEDMENT: AND EROSON CONTROL PRACTICES AND TO BE INSTALLD PROF. IN AND REACTORS SOL DISTUBLIANCES AND WITH THEOREM UP TO THE ON A SEDMENT PROF. CO. HIS STATUSED o all erosion and security control measures stall be installed as described in the frame.
- I. ALL REPOOL HOT TO BE USED FOR THAL GOUGHE SHALL BE REMOVED FROM THE STATEMENTARY AND PLACED IN A STABLED STROPPLE OR THE AREA, ALL TOPSICA REQUIRES FOR FINE, GRUDNE AND STORED ON STR SHALL BE UNCO. THIRTCOLE, THYOMARY SECURIC AND AND ACCOUNTRY AND ASTS.
- 32. THE COMPACIENT STRESS OF STRESS CLEANING HECKSON DURING THE COURSE OF THE PROJECT
- 33. SIDMENT AND EROSON CONTROL STRUCTURES SHALL BE REMOVED AND THE AREA STABULZED WIRN THE SCHWARE AREA HAS BEEN PROPERLY STABULZED BY PERMANENT INDESIRES.

### 4. UPDI COMPLEXEM OF CONSTRUCTION AND ESTABLISHMENT OF PIRALASENT OROLAD OWER, CONTRACTOR Date, 16 MOVE AND DEPOSE OF ERCENT COMPREL MEASURES AND CLEAN SEDMENT AND DEPOSE PROM EN ON DIRECTIONED DATABASE ASSOCIATES.

\\dd\pref\ddshafteina\ff220.00\zes\\d\ptemat\f1220.00\LC.dep http://rz/100.cdfata/sf1920.07\pty/sfcavest\f1220.00\LC.dep

na na	COMPARY	ADDRESS	CITY STATE ZIP	PASCEL ID
POWE	KONFIDERC MODELE FARK LLC	PO BOX 443	MAINOPAC FALLS, NY 10542	65.9-1-11
ROBERT BUTTIGLIONE	the second second second	RTE 118 BOX 68	BALDWIR PLACE, NY 10505	65.10-2-4
CARE LINQUIST	1	1007 WT 6	MAHOFAC, NY 10541	65.10-2-14
BRIAN GALLAGHER		18 BALDWH UN	HAAHOPAC, NY 10541	65.10-2-16
GEORICE PALMIERO		16 COUNKY RD	BRAHOPAC, NY 18541	10.2.3
ELLA RODRUGHEZ		19 BALDWIN IN	MANDRAC, NY 10541	65.10 2-17
KATHLEEN EDWARDS		2 BRUDWIN UN	MAHOPAL, NY 10541	65.10.2.15
ELLEN MAARIE ZUTTOLI		22 BALDWIN DN	MAHOPAC, NY 10541	65 10 2 19
GEORGE PALMIERO		24 COONEY TO	MAHOPAC, NY 10541	65.10-2-2
E GHA GUSS		30 WURDIN POHID RO	MAI-OFAC, NY 10541	65.9-1-12
CARLOS TERENPAGNAY		390 EAST LAKE BLVD	MAROPAC, WY 10541	65.8-1-13
ANTHONY MORANDO		PO BOX 962	MAROPAC, NY 10541	6510-1-52
NCOLE STERN		L'IRTS	MANDRAC, NY 10541	65.9-1-26
ANTHONY MORANDO		20 BOX 962	MARICHAE, NY 10541	65 10-1-51
ent souls of openalizes	ISLAND DREAM ASSOCIATES, LLC	110 CHERRY HILL AD	CARMEL NY 10512	65.10-1-50
	965 EAST LAKE BOULEVAND LLC	PO BOX 307	BALDWIN PLACE, NY 10505	65.9-1-28
	BATISTIA FAMILT LTD PARTNERSHIP	- DE ENGLE RD	DAMBURY, CTOSAID 10575	65.10-1-49.2
	NOXUNG BROOK LIC" AP "MENSHIP	25 MAIN STFLATH	PARTFORD, CT DEED	18.161-19.1
AW/IENCE VELLA	30546 M (6P066 (1)	IS MINOR LT	DREWSTER MY 10509	65.10 1 44 -

500-Foot Abutter's List

Y 10 10 2 43 70 2 S **1**-1-11 -----65 9-1-15 85 9-1-20 65.10-2-4 B-102-11 \* 10 × 10 610 2 2 1074 8 k -3 12 3- 40 10 -2 62 1 40.2 102.31 ---(6) (9-2) 48 Hand de -5.102.24 66 12 2 41 10 10 2 75 - server, L 10-10-2-46 10231 10235 102.36 43 65 10 9-1-13 65 10-1-58 3 ويستنك 10122 0122 012124 012 012 15 10-1-45 45.9-1-14 45.10-1-19 61 20 1.20 40 LO L.23 ------S.10.1.22 - 10.1.22 La 101.13 -----12.1.21 15.10.1.21 4100 -marial 50.10.24 ------ 85. 28-4-14 J .... 40.1 40.10-1 30 -01.18-2.10 2.1 - strengt B.141.25 53 14 1 1 -==== 1-15-24-30 Dista In # 1422 14.1.20 SP 1 71 BIAL: . 65 -B.1423. 55 141-1\* . 44.142.4 65 13-1-67 1.4 10 18 - 00 1 00 1 48 8== 190 Feet

500-Eoot Abutter's Map 500-Foot Abutter's Map

> who be available of the second Barrier of the second Barrier of the second Barrier of the second Barrier of the second Provider socie of the Provider soci

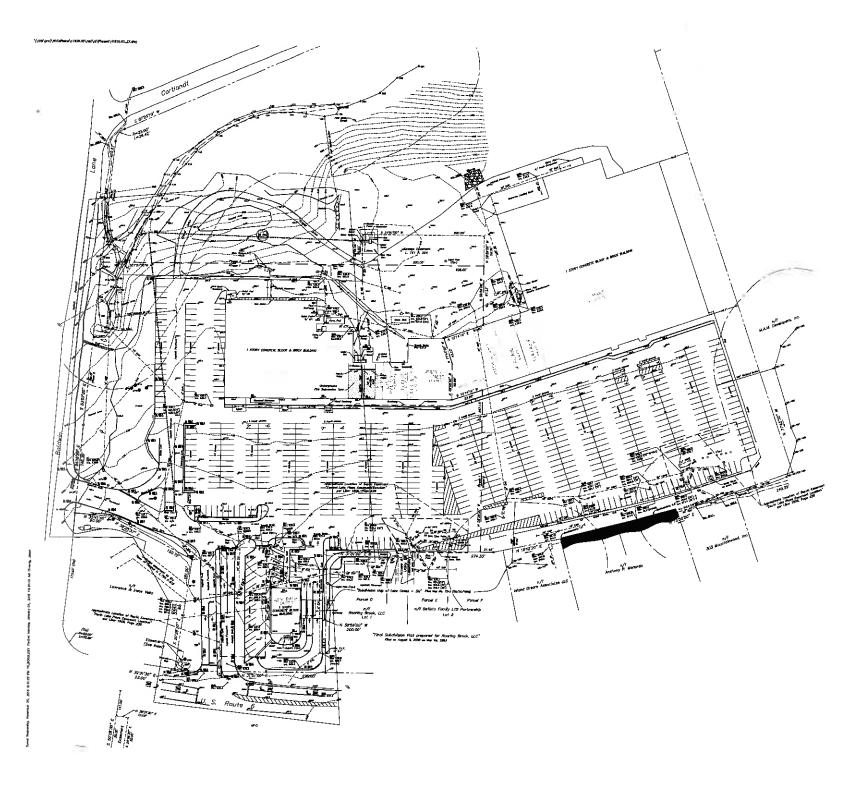
> > Tu Panit 5505145 510143 Proposed Stop & Shop 943-000 Real Stop & Shop 943-000 Real Stop & Shop 943-000 Real Stop 943-000





n Approval "November 90.20 n Approval November 90.20 word for Construction





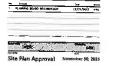




SCALE IN FEE'

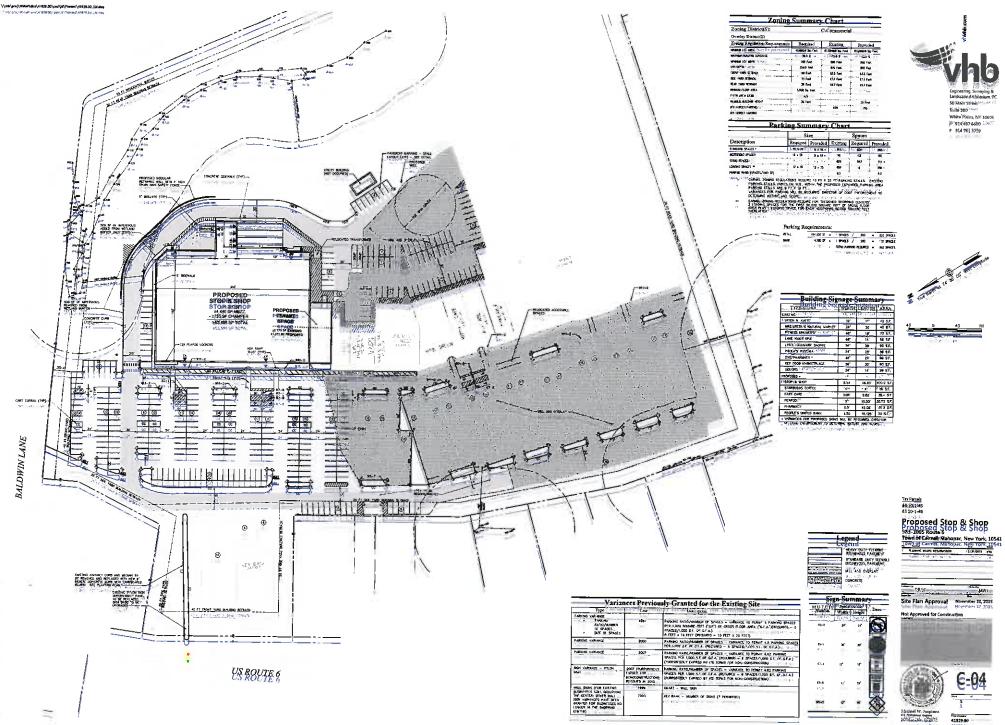
Tex Parcels 65.10-1-45 65.10-1-46

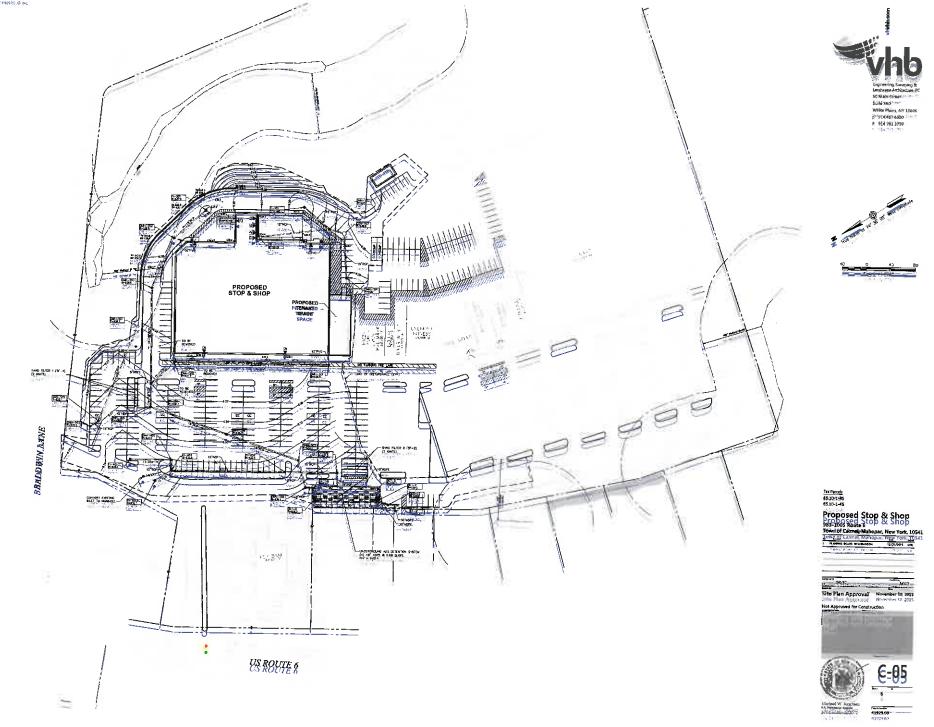
Proposed Stop & Shop 983-2005 Route 6 Town of Carmel, Makopac, New York, 10541

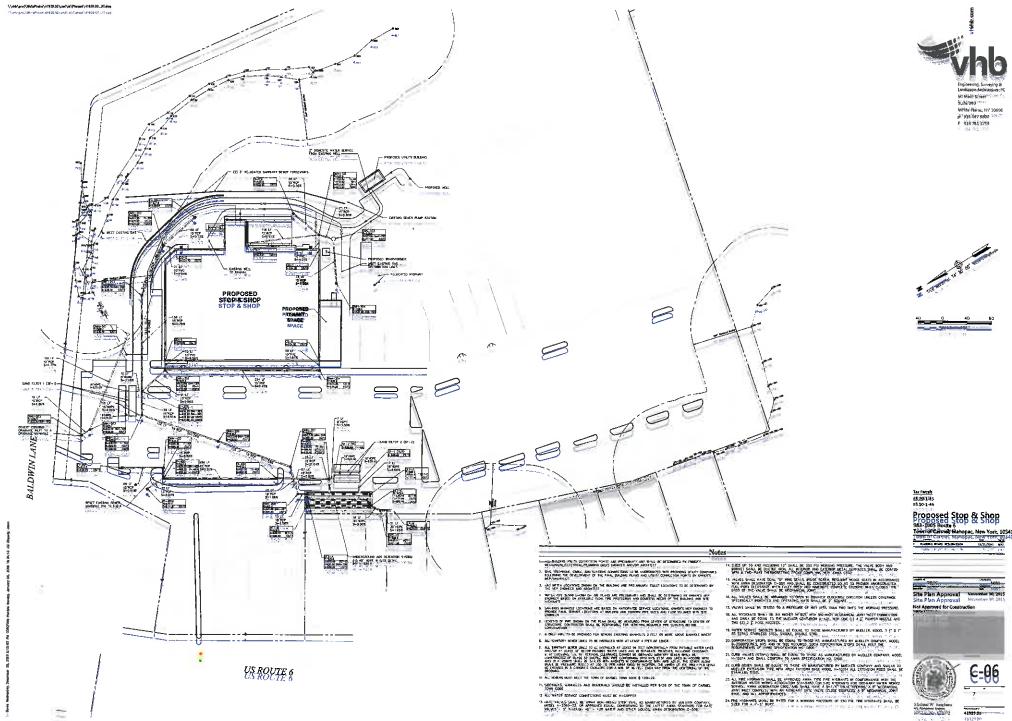


Not Approved for Construction Extention Construction Pillion

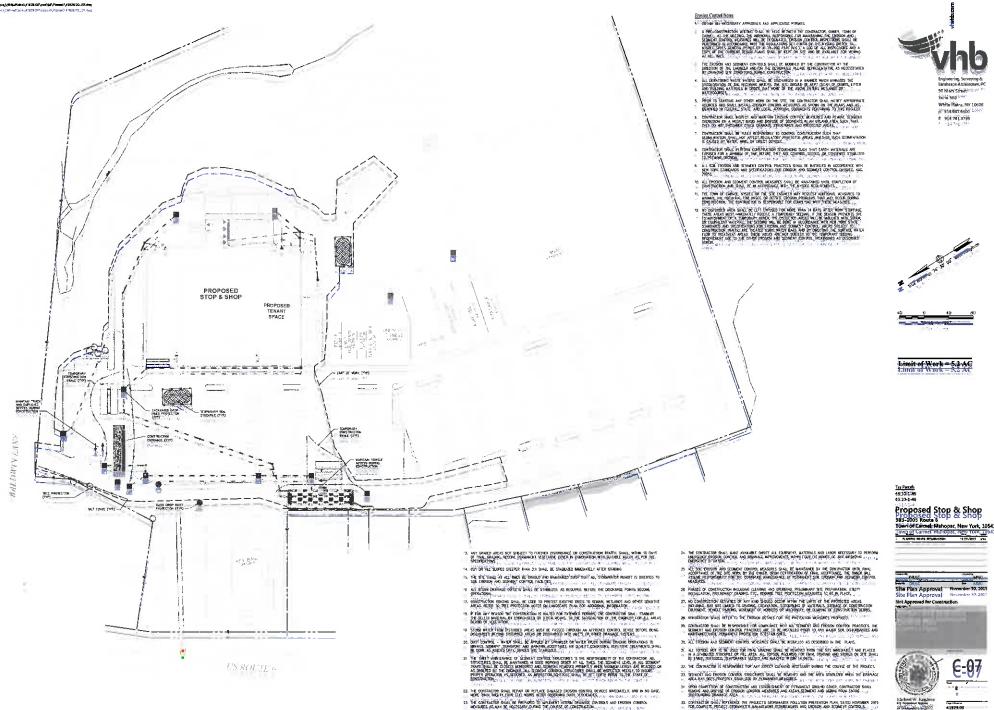












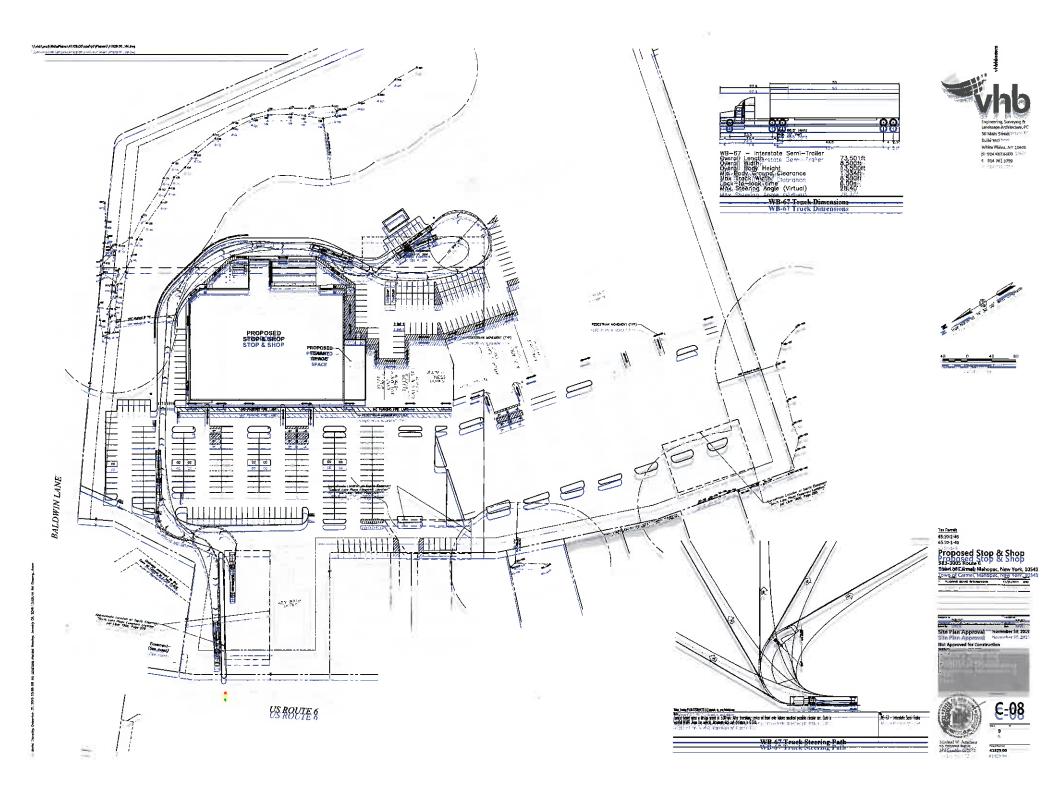
23. The contractor salls be present to implication internation or the same present control manages from the receiver of the contest of identification.

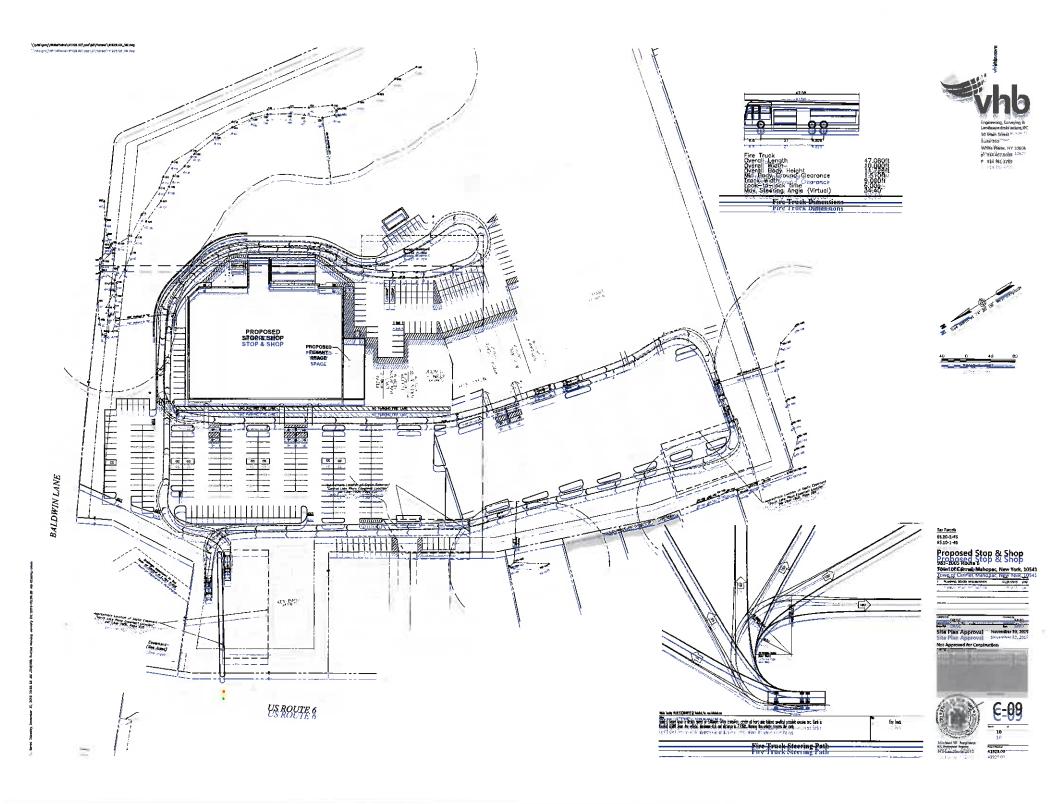
6-07

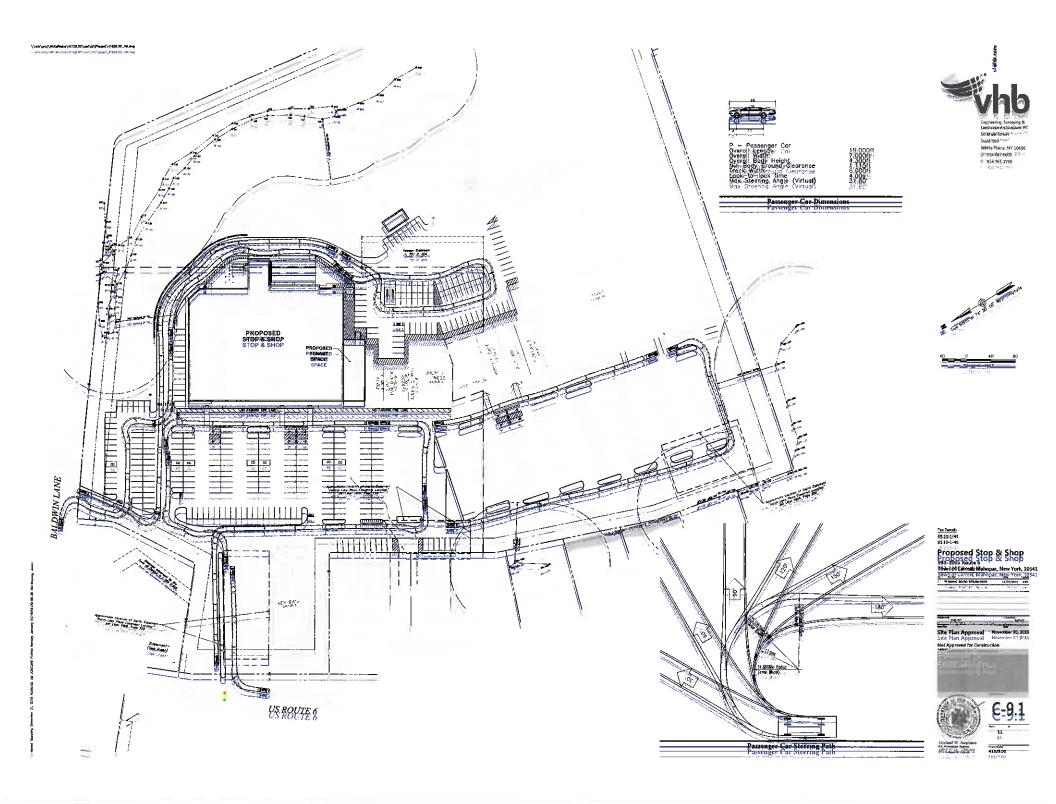
. 8

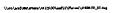
1929.00

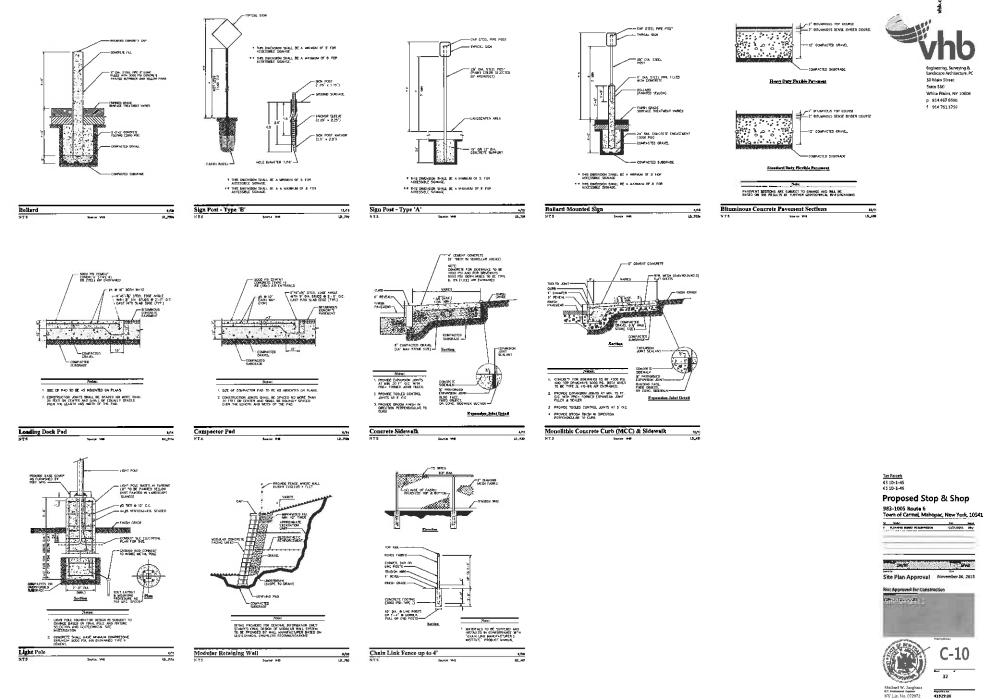




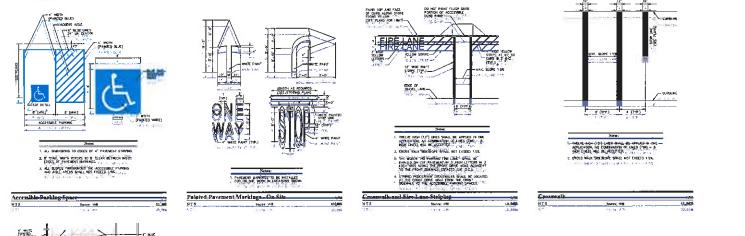




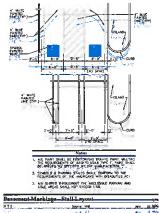




#### 





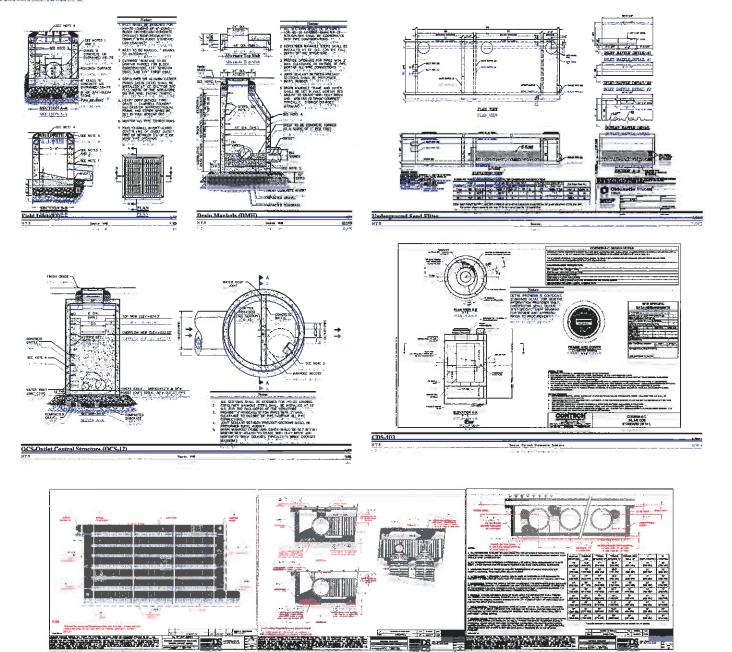




### 

Underground ADS Detention Pipe Syster

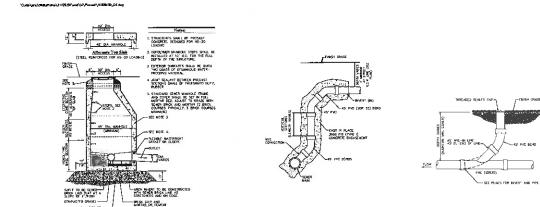
NTS



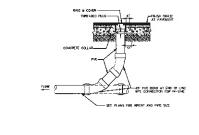




Source: ADS+Np



Sewer Service Chimney



6/13 LD\_363

Cleanout - Paved Area



<u>Tex Parcels</u> 65.10-1-45 65 10-1-48 Proposed Stop & Shop

## 983-1005 Route 6 Town of Carmel, Mahopac, New York, 10541



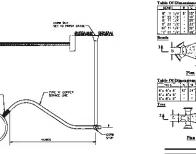
Site Plan Approval aber 10 201 No





Michael W. Junghung 87, Protocial Englant 41929.00 NY Lic. No. 072072





6/58 506\_0

6/08

BRICK CHIP AND MORTAR OR ITAKING CONCRETE FILL

hater: 1 NERALIATIONS DAVID CONTINUE WITH MUNICIPAL MATER WORKS SPECIFICATIONS AND STANDARDS.

PAVED ANEA LANDSCAPED ANEA

7

SEWER LINE SHALL BE INSLACED WHEN COVER IS LESS THAN FOUR (4) FEET AND WHERE SHOWN ON PLANS.

2. WATER LINE SHALL BE INSULATED WEN COVEN IS LESS THAN TWE (5) TEET AND WHERE SHOWN ON PLANS

BACKFUL PLACED IN UTX/TY TREMCHES INELLONG DISTURBED AREAS SUPPORTINGING UTILITY TREMCHES SHALL BE PLACED AND ECOMPACIED IN 12" (MAX.) VENTICAL USTS

CONNENT DURING

DEPTH AND SUMERIC

COMPACTE CURRENTS

1/01 10\_300

Corporation/Curb Stop with Box

COMPACTED CRANLLAS FIL

10.00

Utility Trench - Pipe Insulation

COMPACIED SUBDRADE-Saultary Sewer Manhole (SMH)

> 1 PROJUC BLOCKS FOR TAPPING SLEEVES, DEAD ENDS, GATE VALVES, AND VERTICAL BENDS (SAVE SIZE AS REGURED FOR TEES) PROVIDE, ANCHOR BODS AT VERTICAL BENDS AND GATE VALVES. 2. CONDRETE SHALL NOT BE PLACED ADAMST 3. CONCRETE SHALL BE SODD PSI-TYPE I

> > Utility Treach

Concrete Thrust Block

12 6 45 13 6 87 12 8 87

٥Ô.

Section 2-1

Section 2-2

 TELS
 G
 H
 J

 12", 12", 8"
 12"
 24"
 24"
 18"

 12", 12", 8"
 24"
 18"

 12", 12", 8"
 24"
 18"

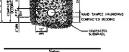
 12", 12", 8"
 24"
 24"

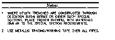
 12", 12", 8"
 24"
 36"







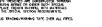




Secon Will



















N.T.S.





#/R 305\_01









Cleanout - Landscape Area

PUNPER COMMECTION

UTSTANICE AS SHOP

----

CRADE -

COMPACITO BACKFUL

DETENSION

CHURIED STONE

Notes: CONCRETE INFOST BLOCKS TO BE USED ONLY WHERE INEY CAN BEAR ON LINDESTRIBED EARTHL USE CLAMPS AND TE RODS OR OTHER ACCEPTABLE METHOD OF JOINT RESTRAINT WHERE SOLL CONDITIONS PROCHEST THE USE OF THRUST BLOCKS.

2 DIMENSIONS Y AND Z SUNLI MUCH MONOPAL REQUIREMENTS

HARDER TELEVAN DE AREA SUBARTE NOT ADUA TON

6' THE D.A. EVTENSION LIDNEAN & FITTING AS REQUIRED

in n CLEAR

UNDISTURISED

1,61 مر م

1/01

AND RAMON

e/m

NT.S

RELIDICATE EXISTING HIT

PANEWENT SURFACE

FACE OF CURP





Java VĐ

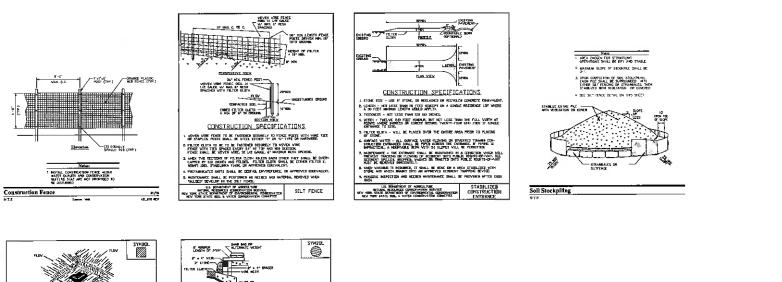
GAR C

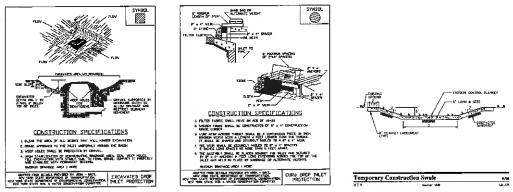


÷

1.0

1/66





<u>Tax Parcels</u> 65 10-1-45 65 10-1-46

#### Proposed Stop & Shop 983-1005 Route 6 Town of Carmel, Mahopac, New York, 10541



全

Landscape Archite SO Main Street

p 914,467,5600 ! 914 761 3759

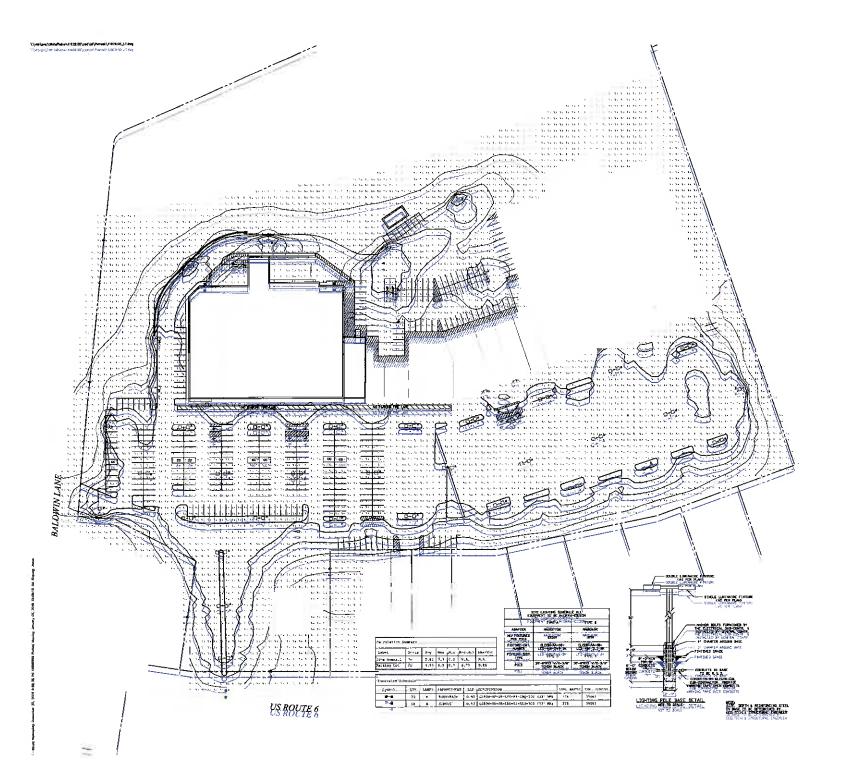
White Plains, NY 10605

Suite 360



Not Approved for Construction

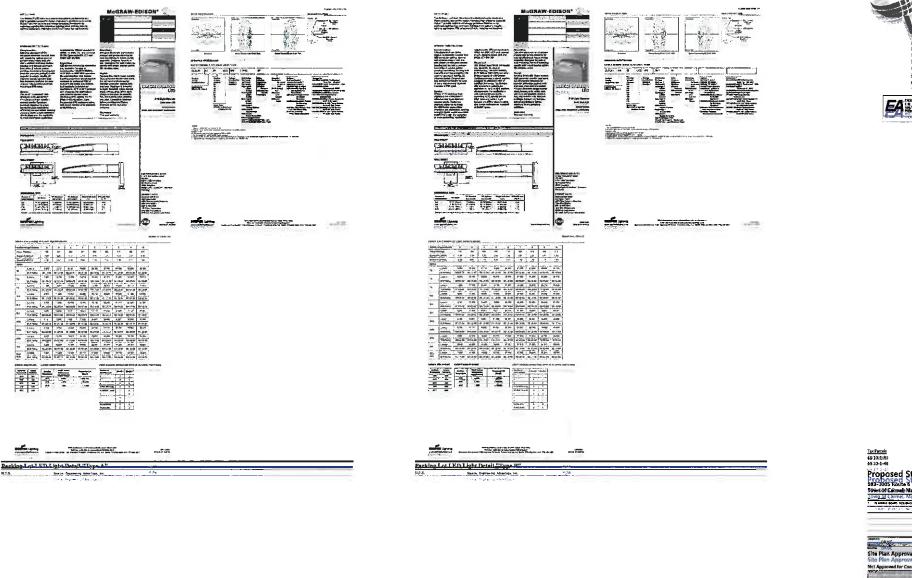






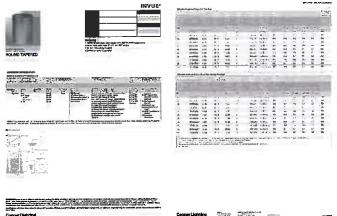








And the second s



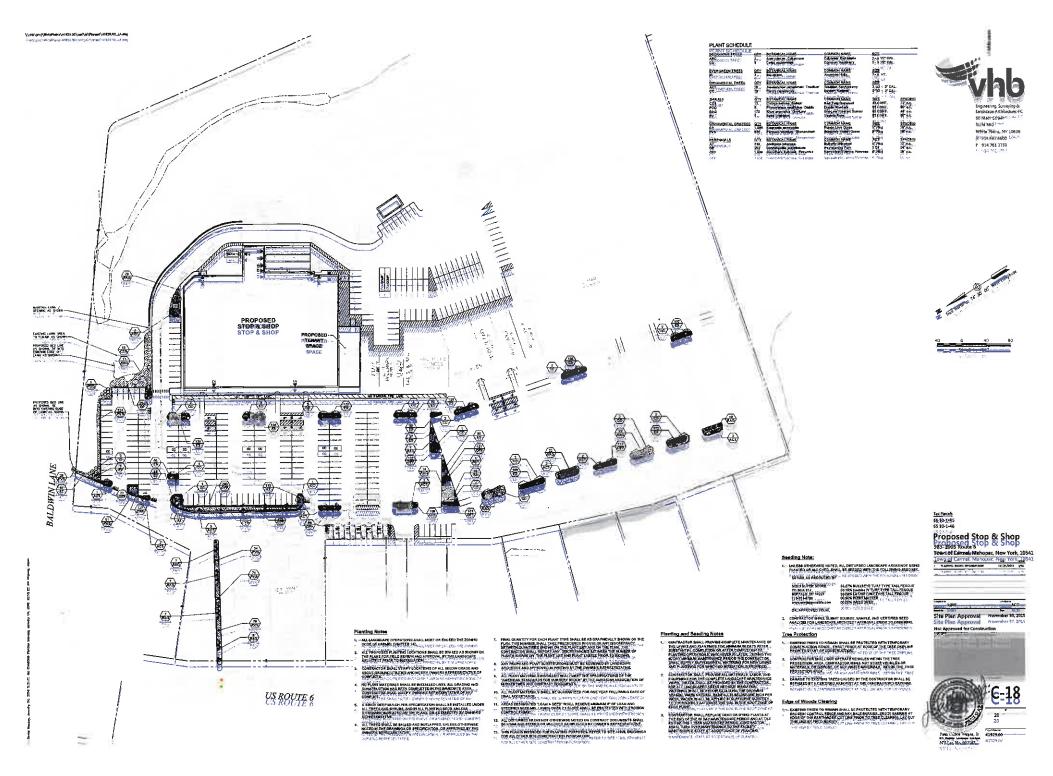




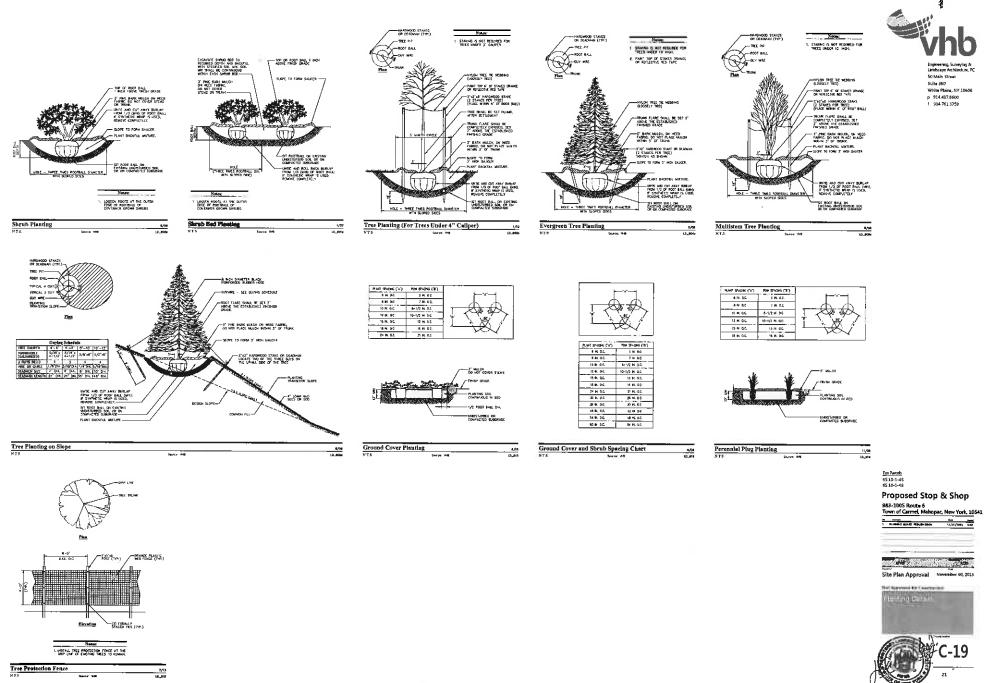






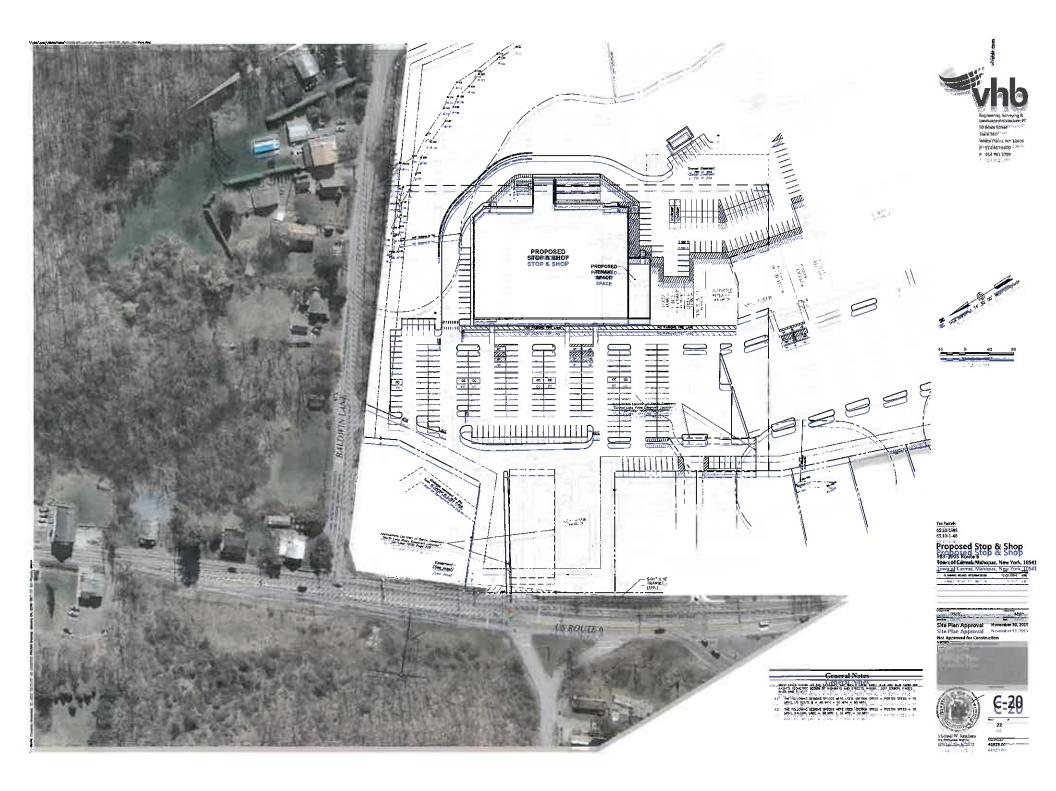


-----



iana\11929.00\cod\id\Pianat\41928.00\_LA.da

Judes Carlos Vergas, Jr 41529.00 NV Lie No 002183





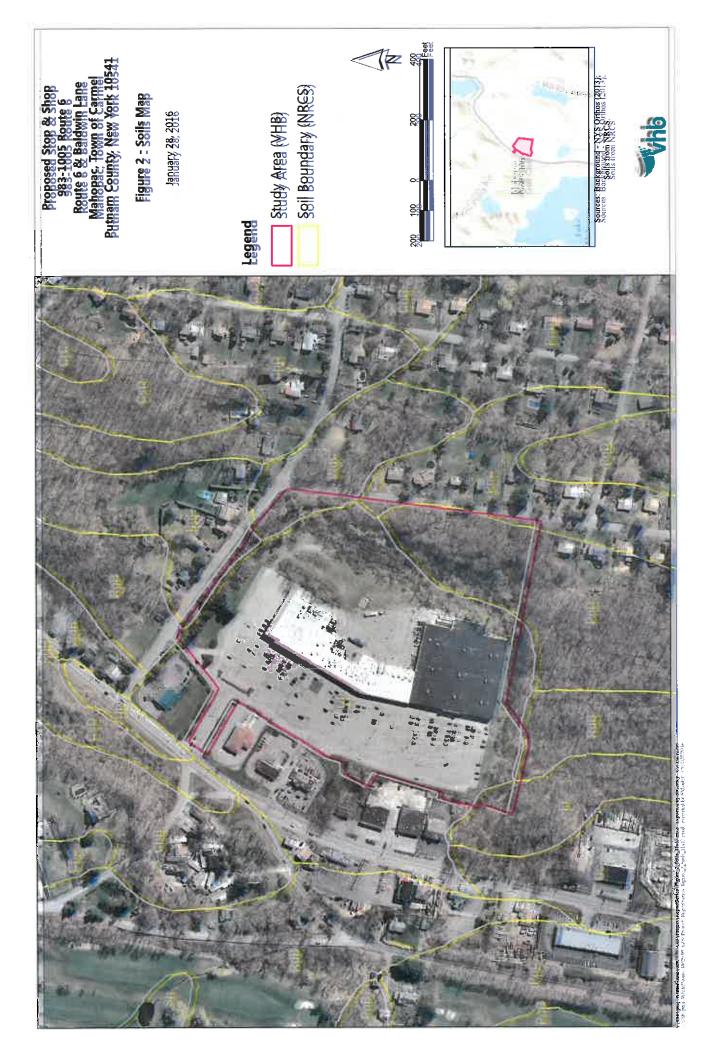
Wetland Permit Application | January 28, 2016

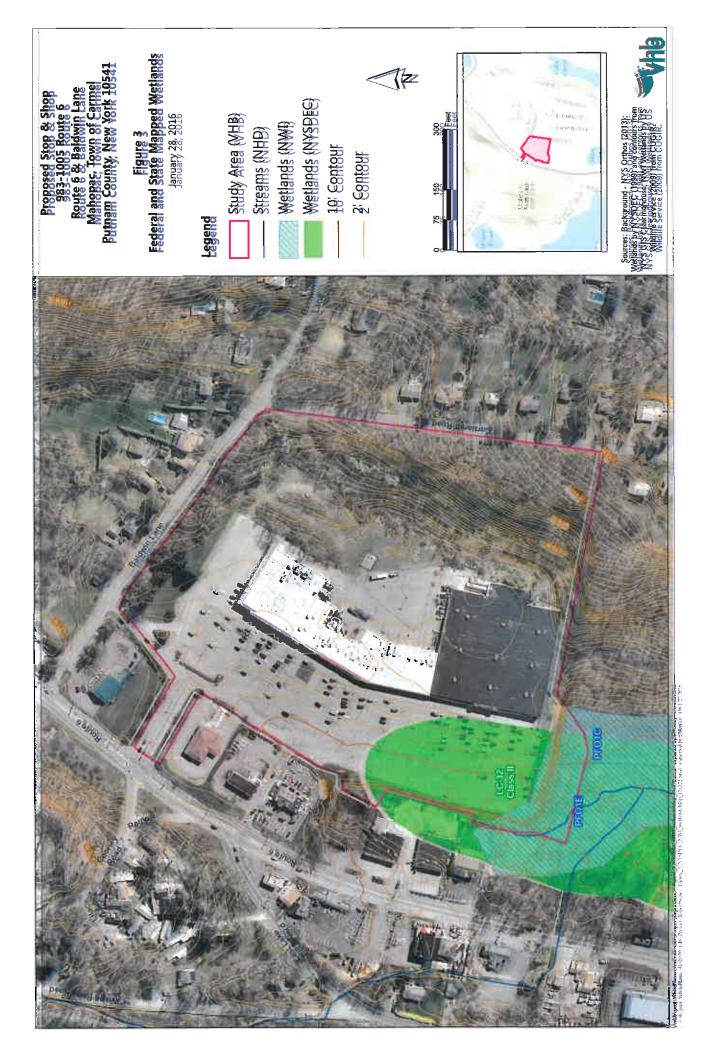
Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

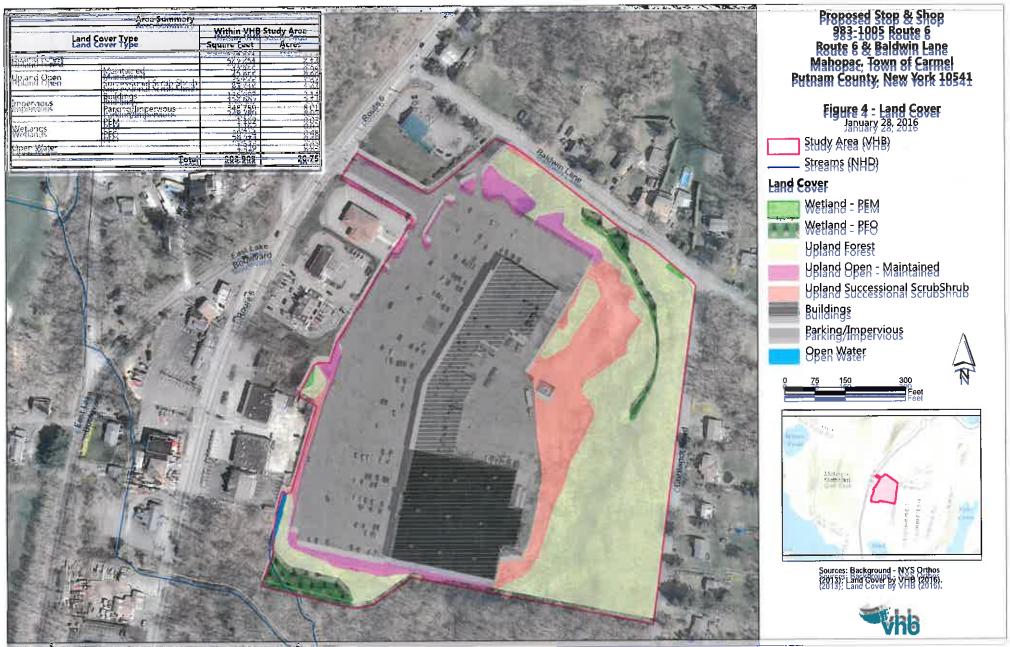
# **Appendix E: Figures**

Figure 1. Site Location Figure 2. Soils Map Figure 3. Federal and State Mapped Wetlands Figure 4. Land Cover Figure 5. Natural Resource Map Figure 6: Flow Map Figure 7. FEMA/FIRM

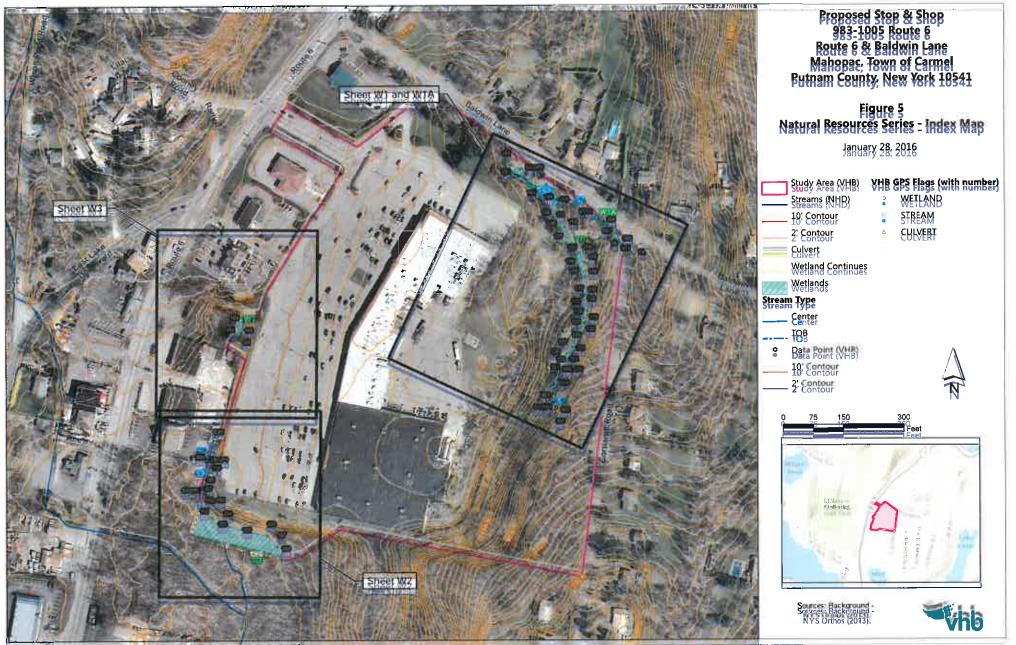




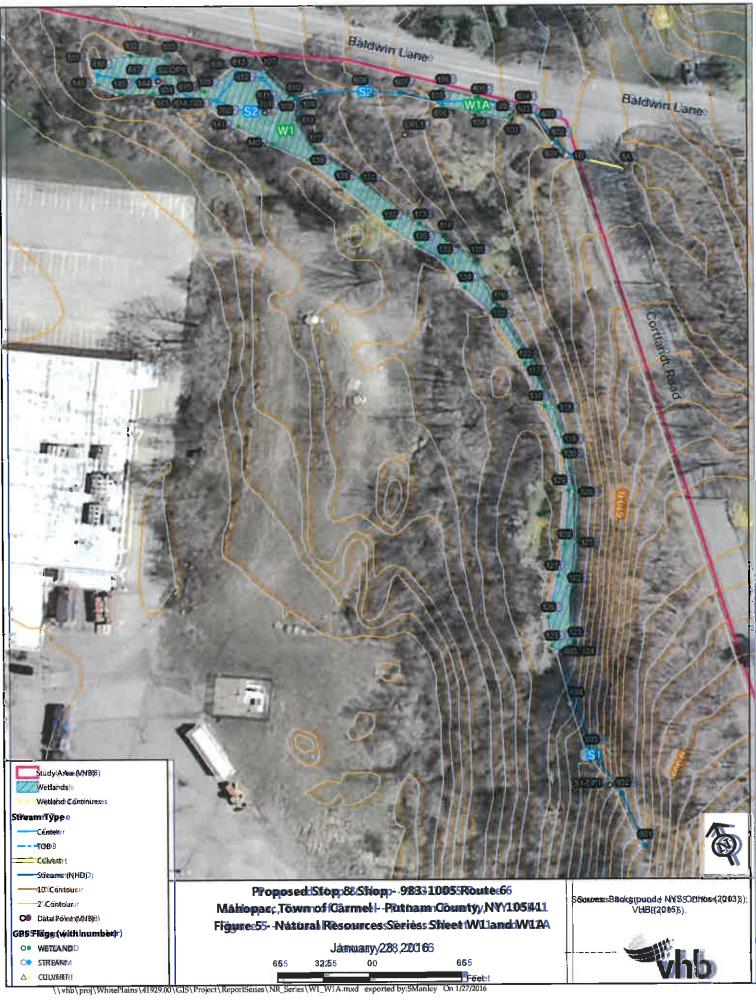


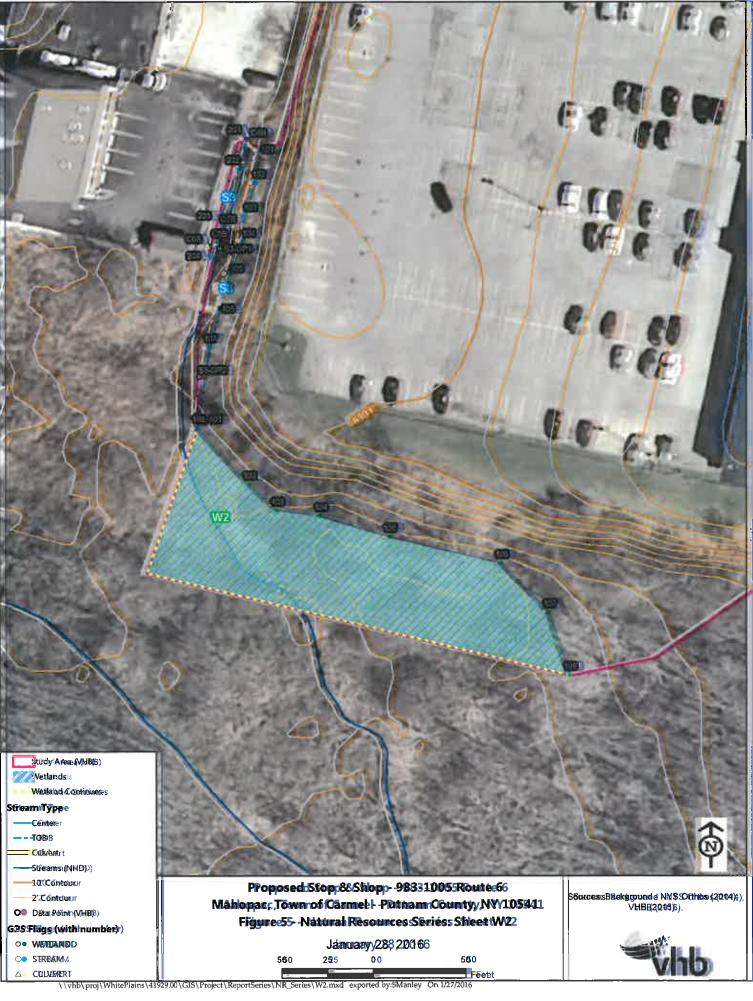


Mathieren and a second seco

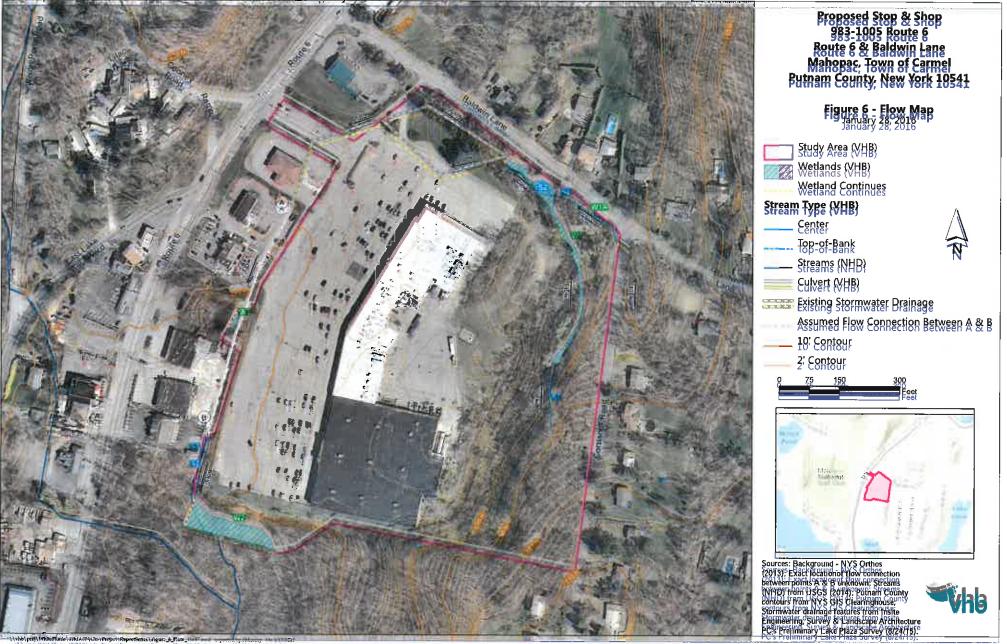


(19) Wine this discount of the set of the

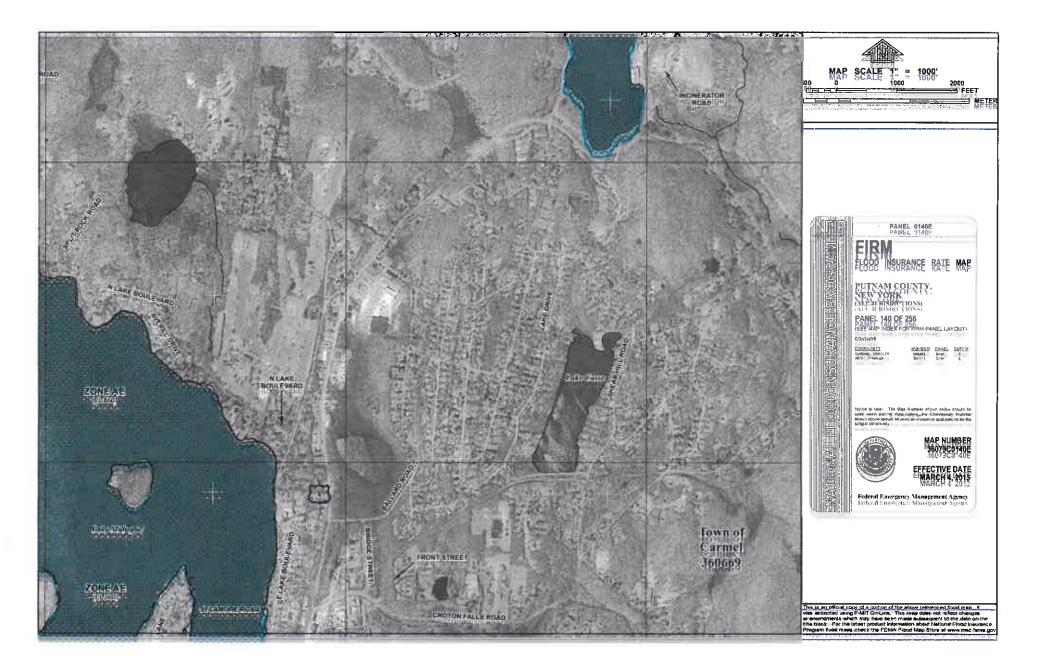








ris 1 amou





Wetland Permit Application | January 28, 2016

Town of Carmel, NY ECB | Proposed Stop & Shop, Mahopac New York

# **Appendix F: Tables**

Table 1: Summary of Soils Table 2: Summary of Delineated Wetlands Table 3: Summary of Delineated Streams

## Lake Plaza Shopping Center, LLC; Heidenberg Properties Group Proposed Stop & Shop 983-1005 U.S. Route 6, Mahopac, Town of Carmel, Putnam County, New York Prepared by VHB; Project 41929.00 Table 1: Summary of Soils

January 28, 2016

						S	oil Areas	
Soil Unit Symbol	6-11-16-1-1-		Slope		Hydric	Within VHB Study Area		
	Soil Type	Landform	(%)	Drainage Class	Soil <sup>1</sup>	(Sq. Ft.)	(Ac.)	Percent (%)
Ff Fluvaquents-Udifluvents com Ff frequently flooded		Flood plains	0-3	Poorly drained	Yes	8,601	0.20	1%
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	o 15 Drumlins, ground 8-15 Well drained I moraines, hills		No	21,318	0.49	2%	
PnD	Paxton fine sandy loam, 15 to 25 percent slopes	Drumlins, ground moraines, hills	15-25	Well drained	No	115,805	2.66	13%
RdB	Ridgebury loam, 3 to 8 percent slopes	Hills, till plains, drumlinoid ridges	3-8	Somewhat poorly drained	Yes	1,414	0.03	0%
RgB	Ridgebury loam, 2 to 8 percent slopes, very stony	Hills, till plains, drumlinoid ridges	2-8	Somewhat poorly drained	Yes	1,060	0.02	0%
Uf	Urban land	N/A	N/A	N/A	No	729,084	16.74	81%
WdC	Woodbridge loam, 8 to 15 percent slopes	Drumlins, ground moraines, hills	8-15	Moderately well drained	Yes	26,611	0.61	3%
					Total	903,893	20.75	100%

<sup>1</sup> Hydric Soil rating from USDA NRCS Soil Survey Geographic Database for Albany County, New York (soil survey area version 4/10/2015).

<sup>2</sup> VHB Study Area extends beyond project parcel boundary to the south and west; however it does not include the Key Bank portion of the property. Thus, the study area total of 20.75 acres is less than the parcel size of ~21 acres.



Lake Plaza Shopping Center, LLC; Heidenberg Properties Group Proposed Stop & Shop 983-1005 U.S. Route 6, Mahopac, Town of Carmel, Putnam County, New York Prepared by VHB; Project 41929.00 Table 2: Summary of Delineated Wetlands January 28, 2016



VHB Wetland ID	Loca	tion	USACE Data Form	Delineated Area <sup>1</sup>		Delineated Area <sup>1</sup>		Cowardin Classification <sup>2</sup>	Freshwater NYSDEC Wetland Type <sup>3</sup> Classificati		Typical Vegetation <sup>4</sup>	Wetland Indicator Comments
1D	Latitude	Longitude		(Sq. Ft.)	(Ac.)							
W1	41.39167	-73.720532	W1-WET1 and UPL1	9,030	0.21	PFO1B	Deciduous Swamp	N/A	Acer rubrum; Salix nigra; Phalaris arundinacea; Celastrus orbiculatus	Saturated at surface; high water table at surface; surface water at 3 inches deep; water-stained leaves; drainage patterns; geomorphic position; microtopographical relief present. Hydric soils.		
W1A	41.391798	-73.720098	N/A	531	0.01	PEM5B	Ernergent Marsh	N/A	Polygonum cuspidatum; Rosa multiflora; Berberis thunbergii; Mitella nuda	Saturated at surface; surface water present; small fringing PEM along S2. Hydric soils.		
W2	41.389679	-73.723504	N/A	11,685	0.27	PFO1C/1E	Deciduous Swamp	LC-32, Class II	Acer rubrum; Fraxinus pennsylvanica; Salix sp.; Cornus sericea; Phragmites australis; Lythrum salicaria	Surface water present. Saturated at surface with high water table in areas not inundated. Water-stained leaves, drainage patterns present. Hydric soils.		
W3 <sup>5</sup>	41.39109	-73,723433	N/A	630	0.01	PEMSB	Emergent Marsh	N/A	Fraxinus pennsylvanica <sup>6</sup> ; Cornus sericea; Phragmites australis	Surface water and saturation; hydric solls.		

Total Area of Wetlands within VHB Study Area 21,876 0.50

NOTES:

<sup>1</sup> Delineated Area is the approximate, VHB GPS-surveyed limits of the identified wetland boundary; wetland areas displayed in **bold** continue outside of the Study Area.

<sup>2</sup> Classification follows Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitat of the United States. U.S. Fish and Wildlife Service. FWS/OBD-79/31. 103pp.

<sup>3</sup> Freshwater Wetland Covertypes follow those described in Section 578.3 of the of the New York State Adirondack Park Agency Rules and Regulations (Last Revised: September 20, 2011).

<sup>4</sup> Species nomenclature follows the USDA Plants Database (USDA - NRCS 2014) http://plants.usda.gov/java/.

<sup>5</sup> Wetland 3 (W3) appears to be an old retention basin that has not been maintained. It has since developed wetland indicators.

<sup>6</sup> Tree stratum rooted outside of Wetland 3 (W3) boundary; however tree canopy cover exists over the wetland area.

#### Lake Plaza Shopping Center, LLC; Heidenberg Properties Group Proposed Stop & Shop 983-1005 U.S. Route 6, Mahopac, Town of Carmel, Putnam County, New York Prepared by VHB; Project 41929.00 Table 3: Summary of Delineated Waters January 28, 2016



Stream	USGS Stream/ Water Name	eam/ Location ater		Average Ordinary High Water (OHW-width or elevation) <sup>2</sup>		Ordinary Stream Channel High Water Within (OHW-width Jurisdictional		Jurisdictional Determination		Flow Regime (Perennial, Intermittent, Ephemeral and Ditch) <sup>4</sup>	Surface Water Classification <sup>5</sup>	Cowardin Classification <sup>6</sup>	Comments
		Latitude	Longitude	(Feet)	(Linear Feet)	(Square Feet)	(Acres)						
51	(unnamed)	41.39057	-73.720565	2	151	302	0.007	Ephemeral	D	Ephemeral	This is an ephemeral stream orginating from the ridge on the easternmost portion of the parcel. It disperses into W1.		
52	(unnamed)	41.391946	-73.720427	4	376	1504	0.035	Intermittent	D	Intermittent	S2 enters the parcel from a culvert under Cordlandt Road. It generally fows northwest, then west, through W1A and W1 until it enters a culvert system; and eventually daylights as S3. While S2 may receive some groundwater discharge from W1, it had few indications of year round flow.		
53	(unnamed)	41.390199	-73.723715	8	110	880	0.020	Intermittent	D	Perennial	53 primarily flows from a culvert system near the southwest portion of the parcel. The stream receives multiple stormwater discharges, and continues south into W2 (NYSDEC Wetland LC- 32). Based upon field observations, W2 hydrology, and Cowardin classifications; S3 was determined to be a perennial stream.		
Total Leng	th and Area o	of Stream Chan Study Are	nel or Other Wat	ers within VHB	637	2,686	0.062			I			

#### NOTES:

<sup>1</sup> VHB's Stream ID refers to unique ID designated in the field.

<sup>2</sup> U.S. Army Corps of Engineers (USACE). 2005. "Regulatory Guidance Letter. Subject: Ordinary High Water Mark Identification." No. 05-05.

<sup>3</sup> Approximate area of delineated streams within the study area is calculated from the average OHW time the length of delineated stream channel within the study area.

<sup>4</sup> Stream flow regime determined based on qualitative observations of in stream hydrology indicators and geomorphic characteristic and are subject to professional judgment.

<sup>5</sup> Surface waters classifications were made pursuant to 6NYCRR, Chapter X, Article 2, Parts 701 (classification and standards definitions), where Class refers to the water quality classification based on existing (or best expected use); and Standard refers to standards of quality established for Class A, B, and C surface waters. Class D waters also refer to intermittent streams (See: http://www.dec.ny.gov/imsmaps/ERM/streamsRiversLakesPonds.htm).

<sup>6</sup> Classification follows Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitat of the United States. U.S. Fish and Wildlife Service. FWS/OBD-79/31. 103pp.