

May 15, 2013

Acton Conservation Commission  
472 Main Street  
Acton, MA 01720

Dear Commission Members:

This office has prepared the enclosed Request for Determination of Applicability for landscape and other improvements to 45 Powder Mill Road for Swanson –Buick-GMC. The applicant plans to move their showroom facilities from the adjacent lot [12 Sudbury Road] to the existing building located at 45 Powder Mill Road. Converting the building to a show room is to involve replacing the existing service doors with windows, other changes to improve the building's facade and interior improvements.

The 100 foot or inner riparian zone from the Assabet River approximates the front property line of the site and 200 foot or outer riparian zone extends across the site at the rear of the building. The Assabet River at this location is mostly contained by walls and the 100 foot offset from any bordering vegetated wetlands should be considered congruent with the edge of the river. The river is located on the opposite side of Powder Mill Road.

The site is elevated above the 100 year flood plain.

The site as it presently exists is shown by this photo, with the exception of recent improvements made within the Town's right of ways.



Entrances to the site from Powder Mill Road are to be narrowed to allow for increased traffic control. The entrance on to Sudbury Road is to be eliminated. The building at 12 Sudbury Road will be utilized for vehicle services and the parking lot will remain in use for vehicle storage. To facilitate vehicle movements between the two buildings a ramp will be constructed parallel to Sudbury Road. The ramp will be for use by employees only and will eliminate the need for vehicles being transferred between the two sites to use Town roads.

The reduction in entrances and entrance widths will result in an addition of landscaped islands along with a decrease in impervious area in the inner riparian zone. As a considerable portion of the islands will be located within the Town right of way, the plans call for the plantings to be coordinated with the Tree Warden.

The street side islands and landscaping around the building will also decrease the impervious areas within the outer riparian zone.

The existing gravel parking area to the side and behind the building is to be used for parking display cars and is to be paved with pervious pavement.

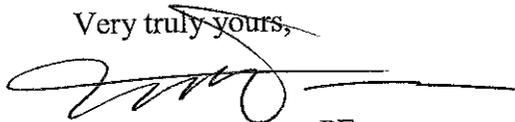
With the addition of the landscape areas our calculations show a decrease in the volume and rate of runoff leaving the site. Some renovation of runoff will occur by its passage over grass surfaces.

The proposed improvements appear to be the most beneficial alternative for the use of the site, including its present use or the demolition of the building and utilizing the entire lot for vehicle parking. Relocating the dealership elsewhere is not a viable alternative.

It is our opinion that the proposed site improvements will result in additional protections being provided to the Interests identified by the Act and the Purposes of the Bylaw and a negative Determination of Applicability should be issued.

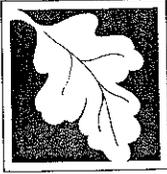
Thank you for any considerations you may give this matter.

Very truly yours,



Mark T. Donohoe, PE  
for: Acton Survey & Engineering, Inc.

cc: Swanson -Buick-GMC  
DEP CERO



# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## A. General Information

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Swanson -Buick -GMC  
Name  
12 Sudbury Road  
Mailing Address  
Acton  
City/Town  
978-344-0844  
Phone Number  
E-Mail Address  
MA  
State  
01720  
Zip Code  
Fax Number (if applicable)

2. Representative (if any):

Acton Survey & Engineering, Inc.  
Firm  
Mark Donohoe  
Contact Name  
P. O. Box 666  
Mailing Address  
Acton  
City/Town  
978-263-3666  
Phone Number  
actonsurvey@actonsurvey.com  
E-Mail Address  
MA  
State  
01720  
Zip Code  
978-635-0218  
Fax Number (if applicable)

## B. Determinations

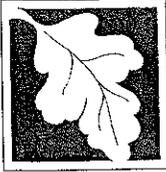
1. I request the Acton Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Acton  
Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

Request for Determination of Applicability Plan for Site Improvements



# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

45 Powder Mill Road	Acton
Street Address	City/Town
J3	59-1
Assessors Map/Plat Number	Parcel/Lot Number

- b. Area Description (use additional paper, if necessary):

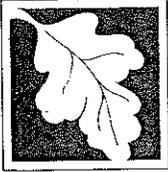
Site consists of a one story concrete block building with paved and unpaved parking areas across Powder Mill Road [Route 62] from Assabet River.

- c. Plan and/or Map Reference(s):

Request for Determination of Applicability Plan for Site Improvements	May 15, 2013
Title	Date
_____	Date
Title	Date
_____	Date
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

Landscaped islands along Powder Mill Road and Sudbury Road are to be expanded or added, portion of gravel parking lot is to be placed in pervious pavement and grassed island, vehicle ramp between site and adjacent property in same use is to be installed and landscaping is to be added around building.



## WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

### C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

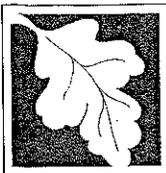
Redevelopment/restoration in a riverfront area is allowed by 310 CMR 15.58(5) provided the proposed work improves existing conditions. Increasing the amount of landscaped areas and the proposed improvements to traffic flow onto roads and to the adjacent site will improve existing conditions. Proposed construction activities are separated from river by public roads and other parking areas, buiding and walls.

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

Quict claim deed of 12/28/1995 [Bk25930 Pg356] refers to lot description in Deed of 4/8/1965 [Bk 10790 Pg 276]



# WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

## D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

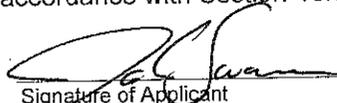
Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

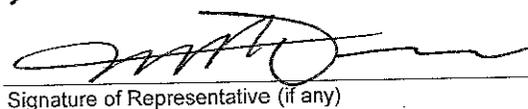
Name and address of the property owner:

JKK, Inc. \_\_\_\_\_  
 Name  
 c/o Swanson -Buick-GMC, 12 Sudbury Road, \_\_\_\_\_  
 Mailing Address  
 Acton, \_\_\_\_\_  
 City/Town  
 MA \_\_\_\_\_ 01720  
 State Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

 \_\_\_\_\_ 5/14/13  
 Signature of Applicant Date

 \_\_\_\_\_ 5/20/13  
 Signature of Representative (if any) Date



Acton Survey &  
Engineering, Inc.

P.O. Box 666 97 Great Rd. Suite 6  
Acton, MA 01720-0666  
(978) 263-3666 Fax (978) 635-0218  
Email: actonsurvey@verizon.net

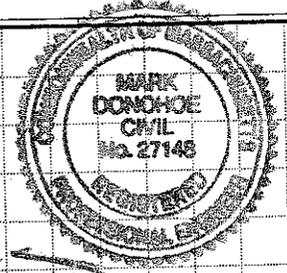
JOB 45 POWDER MILL RD 7094

SHEET NO. 1 OF 3

CALCULATED BY MTO DATE 5-14-13

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE \_\_\_\_\_



COMPARISON OF RUNOFF

SITE IS FORMER GAS STATION AND IS NOW USED FOR STATE VEHICLE INSPECTIONS & STORAGE

*[Signature]*  
5-15-13

SITE WILL BE CONVERTED TO AUTO SHOWROOM WITH PAVED AREAS BEING REMOVED FOR LANDSCAPED ISLANDS AND PERVIOUS PAVEMENT

SOILS ARE MAPPED AS UREAN LAND - NATURAL SOILS IN NEARBY AREAS ARE MINCKLEY HYDROGROUP A

SITE IS ON A OUTWASH TERRACE

SOIL EVALUATIONS ACROSS STREET ENCOUNTERS WATER @ 6-7'

INFILTRATION RATE 8.3"/HR

ROOF RUNOFF - DISCHARGE IS TO GROUND WILL BE TO RECHARGE SYSTEM PERMIT FOR REAR "PUMP OUT"

AREA = 2400 SF

W/ CN = 90 FLAT ROOF TLSS RR 2-3

YR	PRECIP	DIRECT RUNOFF	VOLUME
2	2.5"	2.0	400 CF
10	4.5	3.4	600 CF
25	5.3	4.2	800 CF

USE 74 CONE  9"  
DIP STORAGE 0.34 CF/LK  
STONE (1.66 x 1.5 - 0.34) (0.4) 0.86  
Σ = 1.20 CF/LK



Acton Survey & Engineering, Inc.

P.O. Box 666 97 Great Rd. Suite 6  
Acton, MA 01720-0666  
(978) 263-3666 Fax (978) 635-0218  
Email: actonsurvey@verizon.net

JOB 45 POWDER MILL RD 7099

SHEET NO. 2 OF 3

CALCULATED BY MTD DATE 5-14-13

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE \_\_\_\_\_

$$\Sigma \text{ STORAGE} = 74 \times 1.2 = 89 \text{ CF}$$

$$\text{RECHARGE } 74 \times 1.5 \times 9.2/12 = 76 \text{ CF/MR}$$

PERIOD REQUIRED FOR RECHARGE

YR	RUNOFF	MINUS STORAGE	HRS TO RECHARGE
2	401	310	4.0
10	600	590	7.76
25	820	730	9.6

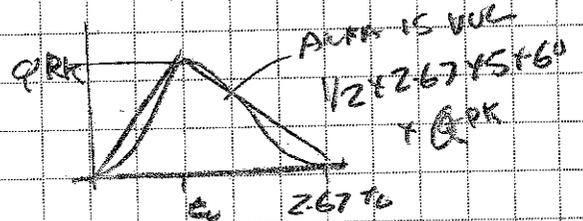
LESS THAN 1/2 DAY TO RECHARGE 24 HRS STORM

RECHARGE SYSTEM WORKS FOR 24 HR STORM

PEAK RATE OF RUNOFF

$C_c = 5$  MIN FLAT ROOF  
 $C = 0.9$  FLAT ROOF

YR	$C_c = 5$	Q PK
2	4.7"/HR	0.25 CFS
10	6.1	0.32
25	7.2	0.38



VOLUME OF Q PK RUNOFF W.K. NEEDS HYDROGRAPH

YR	W.K. Q PK
2	100 CFS
10	132
25	152

SYSTEM IS ADEQUATE FOR 2 YR EVENT AND ATTENUATES 66% OF 25 YR EVENT

COMPARISON OF PRE & POST SURFACE CONDITIONS SHOWS THAT RUNOFF WILL BE DECREASED



Acton Survey & Engineering, Inc.

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Acton, MA 01720-0666  
(978) 263-3666 Fax (978) 635-0218  
Email: actonsurvey@verizon.net

JOB 45 POWDER MILL RD 7094

SHEET NO. 3 OF 3

CALCULATED BY MTO DATE 5-15-13

CHECKED BY DATE

SCALE

SURFACE TYPE	PRE			POST		
	AREA	CN	AXCN	AREA	CN	AXCN
STND BIT CONC (1)	11,800	98	115.6	12,700	98	124.55
BUILDING (2)	3,000	98	29.4	2,750	60	16.5
COMPACT GRAVEL w/ WEARING COURSE	8,650	96	83.0	-	-	-
LOOSE GRAVEL GRASS	3,000	70	21.0	-	-	-
LANDSCAPE/WOODS	3,500	65	22.8	2,500	65	16.3
PREVIOUS PAVEMENT	-	-	-	6,950	60	41.7
HARDEN GRASS	-	-	-	3,350	60	20.1
MISC LANDSCAPE	-	-	-	1,700	65	11.1
	<u>29,950</u>		<u>271.8</u>	<u>29,950</u>		<u>230.2</u>

PRODUCT OF AXCN POST DEVELOPMENT IS LESS THAN PREDEVELOPMENT - RUNOFF IS DECREASED

(1) ON SITE BIT CONC ONLY AMOUNT OF BIT CONC IN ROW IS DECREASED

(2) BUILDING AREA INCLUDES MECH EQUIPMENT AGT CN REFLECTS RECHARGE SYSTEM

**NOTIFICATION TO ABUTTERS  
UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT  
AND THE TOWN OF ACTON WETLANDS BYLAW**

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40 and the Town of Acton Bylaws, you are hereby notified of the following:

The Applicant: Swanson Buick GMC

Address 45 Powder Mill Road Phone 978-263-3666 (Representative)

has filed a Request for Determination of Applicability with the Acton Conservation Commission seeking permission to remove, fill, dredge or alter an Area Subject to Protection under the Wetlands Protection Act.

Applicant's Representative: Acton Survey & Engineering, Inc.

Address 97 Great Road, Suite 6, Acton, MA Phone 978-263-3666

The address of the property where the activity is proposed 45 Powder Mill Road

Town Atlas Plate/Map J3 Parcel/Lot 59-1

Project Description Addition or expansion of landscape islands along Powder Mill & Sudbury Roads. Existing gravel parking area to be pervious pavement and vehicle ramp to 12 Sudbury Road to be constructed.

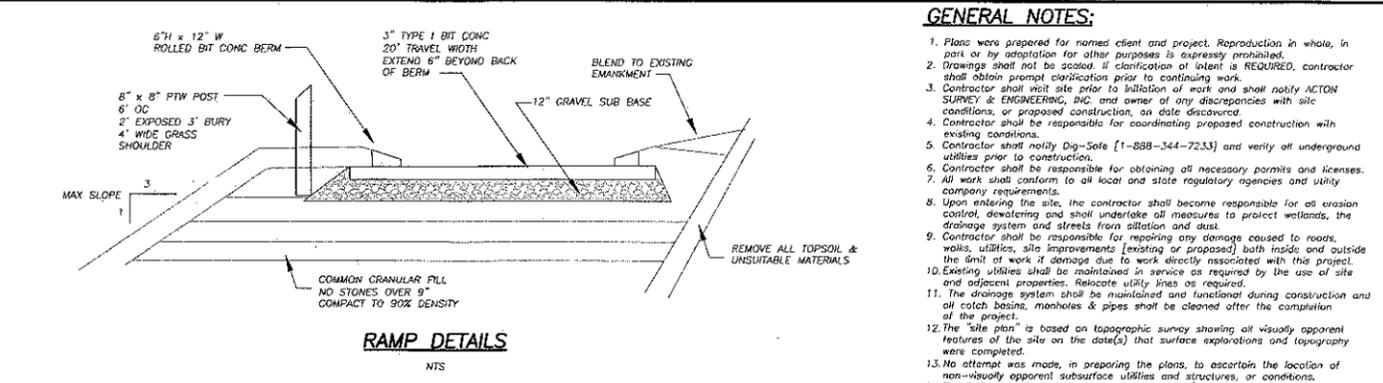
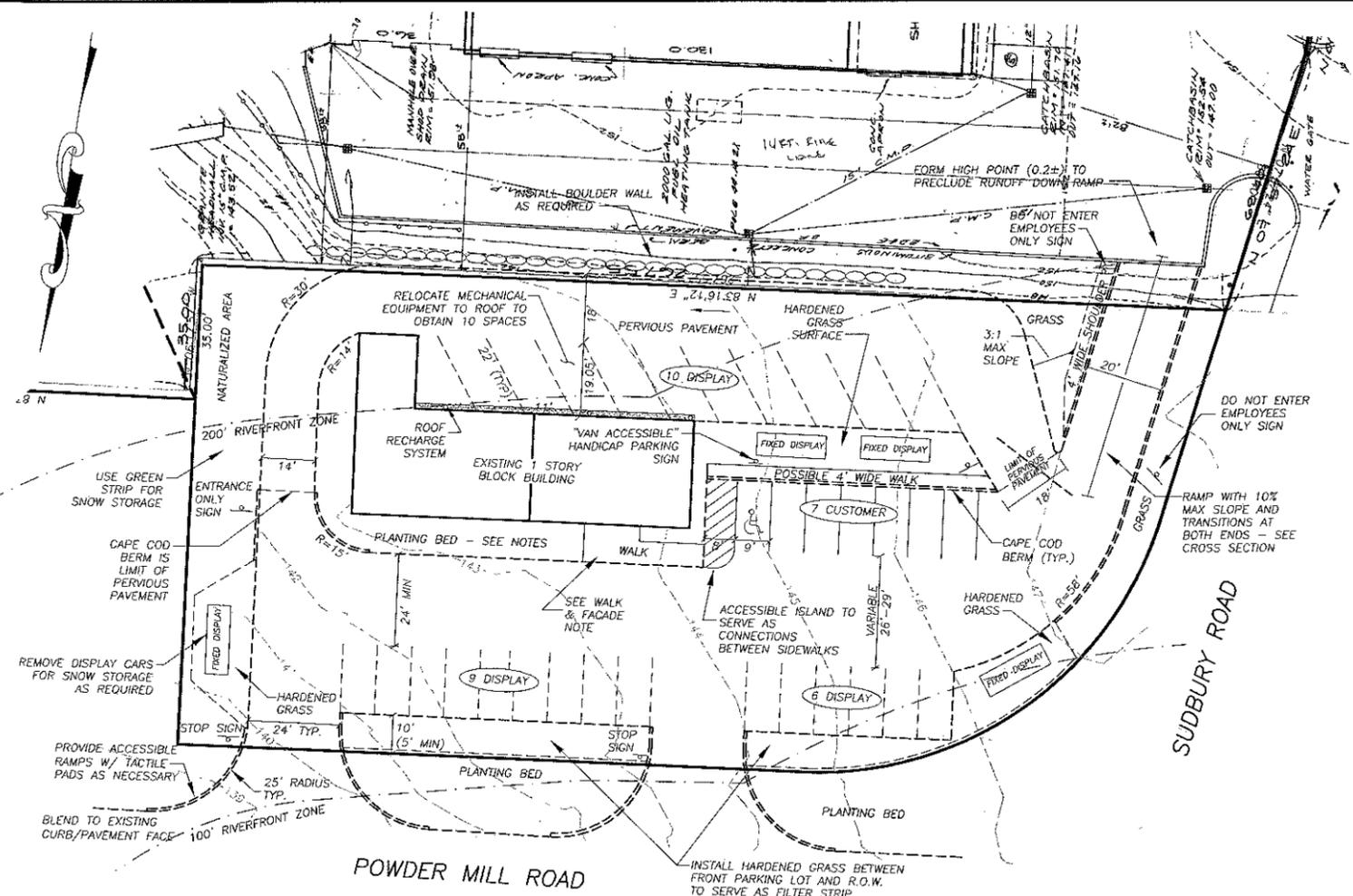
For more information please contact the Conservation Office at 978-929-6634 or email [NR@acton-ma.gov](mailto:NR@acton-ma.gov). Copies of the Request for Determination of Applicability may be examined at the Conservation Office, Acton Town Hall, 472 Main Street, Acton between the hours of 9:00 A.M. and 4:30 P.M. Monday through Friday.

A Public Hearing will be held at the Acton Town Hall, 472 Main Street, on Wednesday,  
June 5, 2013 at 7:40 P.M.  
(date)

The notice of the public hearing will be published at least five (5) days in advance in the Acton edition of the *Beacon* newspaper or *Metrowest Daily News*.

NOTE: You may also contact your local conservation commission or the nearest Department of Environmental Protection Regional Office\* for the information about this application or, the Wetlands Protection Act. Acton is in the Central Region. To contact DEP, call:

**\*DEP Central Region: 508-792-7650  
627 Main Street, Worcester MA 01608**



**GENERAL NOTES:**

- Plans were prepared for named client and project. Reproduction in whole, in part or by adaptation for other purposes is expressly prohibited.
- Drawings shall not be scaled. If clarification of intent is required, contractor shall obtain prompt clarification prior to continuing work.
- Contractor shall visit site prior to initiation of work and shall notify ACTON SURVEY & ENGINEERING, INC. and owner of any discrepancies with site conditions, or proposed construction, on a date discovered.
- Contractor shall be responsible for coordinating proposed construction with existing conditions.
- Contractor shall notify Dig-Soil [1-888-344-7233] and verify off underground utilities prior to construction.
- Contractor shall be responsible for obtaining all necessary permits and licenses.
- All work shall conform to all local and state regulatory agencies and utility company requirements.
- Upon entering the site, the contractor shall become responsible for all erosion control, dewatering and shall undertake all measures to protect wetlands, the drainage system and streets from siltation and dust.
- Contractor shall be responsible for repairing any damage caused to roads, walls, utilities, site improvements (existing or proposed) both inside and outside the limit of work if damage due to work directly associated with this project.
- Existing utilities shall be maintained in service as required by the use of the site and adjacent properties. Relocate utility lines as required.
- The drainage system shall be maintained and functional during construction and all catch basins, manholes & pipes shall be cleaned after the completion of the project.
- The "site plan" is based on topographic survey showing all visually apparent features of the site on the date(s) that surface explorations and topography were completed.
- No attempt was made, in preparing the plans, to ascertain the location of non-visually apparent subsurface utilities and structures or conditions.
- The limit of work shall be as designated and / or the edge of the proposed grading and / or the property lines, if not indicated.
- Materials imported to the site shall be free of hazardous waste and noxious materials, stored as designated and shall not hamper the site activities.
- Materials exported from the site shall become the property of the contractor and be disposed of in a legal manner.
- All existing and new utility structures shall be adjusted to finished grades. Setting of rims temporarily at binder course may be required.
- All water mains, water services and force mains shall have a five (5') site and adjacent properties. Relocate utility lines as required.
- The project shall be complete when the site is found to be free of debris, erosion resistant, all erosion barriers are removed and pavements, catch basins, manholes and pipes are clean.
- The contractor shall clearly mark the limits of work in the field prior to the start of construction.
- Hauling of earth to or from the site shall be done between the hours of 8:00 a.m. and 4:00 p.m. on weekdays only.
- Any obstructions within 100 feet of a wetland (200 feet of a stream) shall require a filing with the Conservation Commission. Dewatering shall be controlled so as to not impact wetland resource areas.

**SITE MAINTENANCE FOR STORMWATER CONTROL**

MAINTAINING ALL SURFACES AT AND TRIBUTARY TO THIS SITE IN AN EROSION-RESISTANT CONDITION AND FREE OF MATERIALS THAT COULD BE CARRIED BY RUNOFF IS THE ONLY METHOD OF MAINTAINING THE SITE SO THAT OFFSITE IMPACTS DUE TO STORMWATER RUNOFF ARE MINIMIZED. THE PROCEDURES OUTLINED BELOW SHOULD BE CONSIDERED AS THE MINIMUM REQUIREMENTS TO CONTROL MATERIALS CONTAINED IN RUNOFF AND SHOULD BE ADAPTED AND EXPANDED BASED ON LONG TERM EXPERIENCES.

**LIMITING USE OF SAND AND SALT**  
SNOW REMOVAL SHALL BE THE PRIMARY METHOD OF PROVIDING SUITABLE SURFACES FOR PEDESTRIAN AND VEHICLE SAFETY DURING THE WINTER MONTHS.

AS ONLY THE FLAT FRONT PARKING LOT WILL BE UTILIZED FOR VEHICLES OPERATED BY THE PUBLIC AND THIS AREA IS WELL EXPOSED TO AFTERNOON SUN, THE REMOVAL OF SNOW TO FACILITATE AFTERNOON MELTING WILL ALLOW FOR VEHICLE AND PEDESTRIAN SAFETY WITHOUT THE USE OF SAND AND SALT.

THE SIDEWALK IN FRONT OF THE BUILDING WILL BE SHADED DURING THE EARLIER PERIODS OF THE DAY AND LIMITED APPLICATION OF SAND AND SALT MIGHT BE NECESSARY. ONCE SAFE CONDITIONS ARE ACHIEVED THE REMAINING SAND SHOULD BE SWEEPED UP AND RETAINED FOR REUSE.

THE PERVIOUS PAVEMENT AT THE REAR OF THE BUILDING WILL BECOME "LOGGED" IF SAND IS APPLIED OVER AN EXTENDED PERIOD OF TIME, AS THIS AREA IS ONLY TO BE UTILIZED FOR THE STORAGE OF DISPLAY CARS. THE USE OF SAND AND SALT SHOULD NOT BE REQUIRED AND IS PROHIBITED. CARS TO BE TEST DRIVEN SHOULD BE DRIVEN TO THE FRONT OF THE BUILDING BY SALES PERSONNEL IF SNOW AND ICE ARE PRESENT.

THE RAMP IS ONLY TO BE DRIVEN ON BY EMPLOYEES AND PROMPT REMOVAL OF SNOW SHOULD ALLOW FOR SAFE OPERATION WITHOUT THE USE OF SAND.

**PAVEMENT MAINTENANCE**  
PAVEMENTS SHALL AT ALL TIMES BE KEPT FREE OF MATERIALS THAT COULD BE CARRIED BY RUNOFF.

SAND AND MATERIALS DROPPED BY VEHICLES ONTO PAVEMENTS SHOULD BE REMOVED BY BROOM AND SHOVEL AS SOON AS THEY ARE OBSERVED, AND SHALL BE PLACED IN CONTAINERS FOR SUITABLE DISPOSAL.

TRASH AND LANDSCAPE LITTER SHOULD BE REMOVED AS SOON AS OBSERVED. VACUUM SWEEPING OF PAVED AREAS SHALL BE DONE DURING APRIL OR EARLY MAY WITH SPECIAL ATTENTION BEING GIVEN TO THE AREA OF PERVIOUS PAVEMENTS. IT IS IMPORTANT THAT MATERIALS BE REMOVED FROM THE PERVIOUS PAVEMENT PRIOR TO THEIR MIGRATING TO THE LOWER LEVEL OF THE PAVEMENT.

MORE FREQUENT VACUUM SWEEPING MAY BE REQUIRED BASED ON EXPERIENCE. THE LIMITING AND PROMPT REMOVAL OF MATERIALS DEPOSITED ON OR CARRIED TO PAVEMENTS WILL DECREASE THE NEED FOR AND COST OF VACUUM SWEEPING.

**LANDSCAPED SURFACES**  
LANDSCAPE LITTER (LEAVES, GRASS CLIPPINGS, ETC.) SHOULD BE REMOVED BY HAND RAKING AND PROPERLY DISPOSED OF. BLOWING OF SMALL MATERIALS TO "HIDE THEM" WILL RESULT IN THEIR BEING CARRIED TO PAVEMENTS AND IS PROHIBITED.

ALL SURFACES SHALL BE MAINTAINED SO THAT THEY ARE EROSION-RESISTANT, AND AREAS SUBJECT TO EROSION SHALL BE STABILIZED AS SOON AS POSSIBLE SO THAT THEY DO NOT EXPAND.

RUNOFF DOWN THE SLOPES FROM THE BUILDING ABOVE AND SUBBURY ROAD SHALL NOT OCCUR AND BERMS OR OTHER FACILITIES THAT SERVE TO ELIMINATE SUCH FLOWAGES SHOULD BE KEPT IN PLACE AT ALL TIMES. SNOW FROM THE PARKING LOT SERVING THE BUILDING ABOVE SHALL NOT BE PLACED ON THE SLOPE.

THE AREAS OF "HARDENED GRASS" ALSO SERVE TO INCREASE INFILTRATION AND THESE AREAS OF GRASS SHOULD BE AERATED AT LEAST ONCE A YEAR.

ALL LANDSCAPE AREAS SHALL BE MAINTAINED IN A HEALTHY CONDITION AND ANY DEAD MATERIALS SHALL BE PROMPTLY REMOVED.

**SPILL CONTAINMENT**  
A CONTAINER OF ABSORBENT MATERIAL (SUCH AS SPEED-DRY) SHALL BE KEPT WITHIN THE BUILDING WITH CLEANING SUPPLIES, AND ALL EMPLOYEES SHALL BE MADE AWARE OF ITS PRESENCE AND INSTRUCTED TO USE IT TO CONTAIN ANY LEAKED OR SPILLED LIQUIDS.

ANY SPILLS THAT CANNOT BE CONTAINED BY SMALL AMOUNTS OF ABSORBENT MATERIAL SHALL BE REPORTED TO THE ACTON FIRE DEPARTMENT [978-264-9645] AND DEP SPILL RESPONSE [888-304-1133].

**EMBANKMENTS**  
THE EXISTING EMBANKMENT ALONG THE SOUTH PROPERTY LINE AND THE PROPOSED RAMP, INCLUDING ANY AREA THAT CANNOT BE MOVED BETWEEN THE RAMP AND SUBBURY ROAD IS TO BE MAINTAINED IN NATIVE GRASSES.

BRUSH SHALL BE REMOVED AND AREA SUBJECT TO OR WITH THE POTENTIAL FOR EROSION SHALL BE STABILIZED BY THE PLACEMENT OF A BIODEGRADABLE NET. TOPSOIL SHALL BE ADDED AS REQUIRED AND AREAS SEEDING WITH AN APPROPRIATE LOW MAINTENANCE SEED MIXTURE FOR DRY SITES, SUCH AS NE EROSION CONTROL/RESTORATION MIX FOR DRY SITES [NHEP.COM]

**MAINTENANCE [SEE "SITE MAINTENANCE FOR STORMWATER CONTROL"]**  
THE SITE MUST BE MAINTAINED LITTER FREE TO PROTECT THE WADABILITY OF THE PERVIOUS PAVEMENT AND TO DECREASE IMPACTS ON OTHER STORMWATER MANAGEMENT SYSTEMS.

THE EMBANKMENTS SHOULD BE MAINTAINED BY HAND METHODS TO REDUCE THE POSSIBILITY OF PROGRESSIVE SLIP. LATE SPRING AND EARLY FALL MOWING BY HAND HAYD TRIMMERS IS RECOMMENDED WITH ALL CUT MATERIALS BEING PROMPTLY REMOVED IS RECOMMENDED.

THE PERVIOUS PAVEMENT SHOULD BE VACUUM SWEEPED AFTER THE MOWINGS AND PERIODICALLY AS NECESSARY TO REMOVE MATERIALS CONTAINED IN VOIDS.

**EROSION AND SEDIMENT CONTROL**

A WELL ORDERED CONSTRUCTION PROCESS THAT LIMITS THE EXTENT AND LENGTH OF TIME THAT AREAS WITH A POTENTIAL FOR EROSION ARE PRESENT ON THE SITE SHALL BE THE PRIMARY EROSION CONTROL METHOD UTILIZED DURING THE REDEVELOPMENT PROCESS OF THIS SITE.

**LIMITING THE CONCENTRATION OF RUNOFF ACROSS EROSION-PRONE SURFACES IS EQUALLY IMPORTANT.**

THE SITE SHALL BE KEPT NEAT, ORDERLY, AND LITTER-FREE AT ALL TIMES.

**PROTECTION OF POWDER MILL ROAD**  
THE STORMWATER COLLECTION SYSTEM (CATCH BASINS) IN POWDER MILL ROAD DISCHARGE TO THE ASSABET RIVER AND ANY PRODUCTS OF EROSION REACHING THE SURFACE OF THE ROAD OR PAVEMENTS DIRECTLY CONNECTED TO THE ROAD COULD BE DISCHARGED TO THE RIVER.

PRODUCTS OF EROSION AND OTHER EARTHEN MATERIALS SHALL NOT REACH THE SURFACE OF POWDER MILL ROAD.

BARRIERS COMPOSED OF SANDBAGS OR SILT SOCKS WEIGHTED BY SANDBAGS SHALL BE AVAILABLE ON SITE AS TEMPORARY MEASURES TO DIVERT OR CONTAIN RUNOFF.

MINIMIZING THE AREA TRIBUTARY TO THE BARRIERS WILL DECREASE THE AMOUNT OF RUNOFF TO BE CONTAINED AND INCREASE THE EFFICIENCY OF THE BARRIERS.

**STABILIZATION OF SURFACES**  
THE SIZE OF AREAS DISTURBED DURING ANY PERIOD SHALL BE HELD TO THE MINIMUM PRACTICABLE, AND AREAS SHALL BE MADE EROSION-RESISTANT AS SOON AS POSSIBLE.

WORK SHALL BE SCHEDULED TO THE EXTENT POSSIBLE SO AS TO ALLOW SEEDING OF GRASS AREAS TO BE PERFORMED DURING OPTIMUM PERIODS FOR GERMINATION. GENERALLY, THE PERIODS FROM 3/15 TO 6/15 AND 8/15 TO 10/15 ARE BEST FOR PLANTING GRASS.

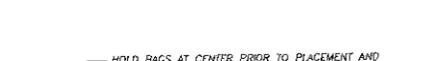
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WITH THE EXCEPTION OF THE EMBANKMENT AT THE REAR AND SUBBURY ROAD SIDES OF THE SITE, THE FLAT SLOPES DO NOT RESULT IN RAPID RATES OF RUNOFF. THE DIVERSION OF RUNOFF FROM THE UPHILL DEALERSHIP AREA AND FROM SUBBURY ROAD COULD CAUSE EROSION AND FLOW ONTO DISTURBED SURFACES SHOULD NOT OCCUR. SANDBAG DIKES CAN BE AN EFFECTIVE METHOD OF PRECLUDING RUNOFF ONTO THE SITE, BUT CARE MUST BE TAKEN TO NOT DIVERT THE RUNOFF TO AREAS THAT COULD CAUSE DAMAGES.

THE RAMP TO BE CONSTRUCTED BETWEEN THE TWO PROPERTIES HAS BEEN DESIGNED TO INCLUDE A HIGH POINT TO STOP RUNOFF FROM FLOWING DOWN IT. THE HIGH POINT SHALL EXIST DURING ALL PHASES OF CONSTRUCTION OR SOME OTHER TEMPORARY MEANS OF DIVERTING RUNOFF SHOULD BE INCORPORATED INTO THE CONSTRUCTION PROCESS.

**WINDBORNE EROSION**  
THE SITE IS WELL EXPOSED TO THE NORTHWEST AND A METHOD OF ADDING MOISTURE TO THE SURFACE OF DRY SOILS SHOULD BE AVAILABLE.



**SAND BAG DIKE DETAIL**  
N.T.S.

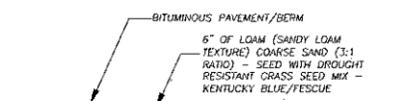
**FRONT SIDEWALK - FACADE NOTES**

THE BUILDING RENOVATION MAY INCLUDE THE ADDITION OF A "SIGNATURE" ENTRANCE AT THE MAIN ENTRANCE UTILIZED BY CUSTOMERS. THE ENTRANCE ADDITION MUST BE LESS THAN 1,200 SQUARE FEET OR THE SITE PLAN APPROVAL PROCESS MUST BE ENTERED INTO.

THE SIDEWALK EXTENDING FROM THE ACCESSIBLE SPACE ISLE IS TO BE EXTENDED TO THE FACADE ENTRANCE AND THE SIZE AND TYPE OF SIDEWALK IS TO BE DESIGNED BY THE PROJECT ARCHITECT TO ALLOW ACCESS FROM THE VAN ACCESSIBLE SPACE SHOWN.

A VAN ACCESSIBLE SPACE IS NOT REQUIRED AS THE NUMBER OF PUBLIC PARKING SPACES IS LESS THAN 15.

IF NECESSARY THE DISPLAY SPACES ACROSS FROM THE BUILDING MAY BE MOVED TOWARDS POWDER MILL ROAD BY FIVE FEET TO ALLOW A LARGER AREA FOR LANDSCAPE AND SIDEWALK AT THE FRONT AND ADJACENT TO THE BUILDING.



**HARDENED GRASS DETAILS**  
N.T.S.



**BOULDER WALL DETAILS**  
N.T.S.



**PERVIOUS PAVEMENT DETAILS**  
N.T.S.

- PAVEMENT DETAIL AND NOTES ARE BASED ON UNIVERSITY OF NEW HAMPSHIRE STORMWATER CENTER DESIGN SPECIFICATIONS FOR POROUS ASPHALT AND INFILTRATION BEDS DATA - SEE THEIR PUBLICATION FOR ADDITIONAL DATA.
- THE BITUMINOUS CONCRETE PAVEMENT - POROUS ASPHALT MIX - SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL AND SHALL MEET THE NH SPECIFICATIONS UNLESS OTHERWISE APPROVED IN WRITING.
- THE SOURCE OF ALL MATERIALS AND THE SCHEDULE OF PLACEMENT SHALL BE SUBMITTED TO THE ENGINEER.
- BANK RUN GRAVEL SHALL HAVE NO STONES OVER 2 INCHES IN SIZE AND LESS THAN 4 PERCENT PASSING A NUMBER 200 SIEVE.
- INSTALLATION OF ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE NH SPECIFICATIONS.
- EROSION CONTROL MEASURES SHALL BE IN PLACE TO PROTECT THE SURFACE OF THE INFILTRATIVE SURFACE BELOW THE PERVIOUS PAVEMENT SYSTEM AND ALL SURFACES DURING AND AFTER THE INSTALLATION OF THE SYSTEM. WIND BLOWN EROSION MUST BE CONTROLLED.
- THE INFILTRATIVE SURFACE MUST BE FREE OF ACCUMULATED FINES PRIOR TO THE PLACEMENT OF THE SYSTEM AND SHOULD BE SLIGHTLY SCARIFIED, IF COMPACTED DUE TO CONSTRUCTION ACTIVITIES.
- EACH SYSTEM COMPONENT SHALL BE INSTALLED SO THAT THEIR TOP SURFACE IS PARALLEL TO THE FINISHED SURFACE AND HAVE THE MINIMUM DEPTH OR THICKNESS SHOWN IN THE DETAIL. THE DEPTH OF THE BOTTOM CRUSHED STONE LAYER SHALL BE ADJUSTED TO ACHIEVE A UNIFORM TOP SURFACE.
- THE STONE AND GRAVEL SYSTEM COMPONENTS SHALL BE COMPACTED TO 95 PERCENT OPTIMUM DENSITY.
- EACH SYSTEM COMPONENT SHALL BE SUPPORTED ALONG ITS SIDES SO THAT SPREADING DURING AND AFTER CONSTRUCTION DOES NOT OCCUR.
- CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED ON OR PASS OVER THE PERVIOUS PAVEMENT AFTER INSTALLATION. IF PASSAGE IS NECESSARY THE PAVEMENT SHALL BE COVERED BY A SUITABLE WOVEN GEOTEXTILE FABRIC.

**LANDSCAPE NOTES**

THE FLAT AREAS BETWEEN THE PARKING LOT AND POWDER MILL AND SUBBURY ROADS ARE TO BE PLACED IN LAWN AND PLANTED WITH FOUR STREET TREES. LAWN AREA ON PROPERTY IS TO BE HARDENED GRASS AND SERVE AS FILTER STRIP.

THE LAWN SHALL BE ESTABLISHED BY THE PLACEMENT OF 6 INCHES OF SCREENED TOPSOIL CONNECTED FOR ALKALINITY AND FERTILITY AND PLANTED WITH A DROUGHT RESISTANT SEED MIXTURE.

THE SIZE, SPECIES AND PLACEMENT OF THE STREET TREES SHALL BE COORDINATED WITH THE ACTON TREE WARDEN. PLANTING BEDS FOR PERENNIAL AND ANNUAL FLOWERS MAY BE PLACED AROUND THE TREES AND BE ESTABLISHED IN OTHER AREAS.

**BUILDING FACADE**  
THE AREA IN FRONT OF THE BUILDING SHALL BE LANDSCAPED WITH A COMBINATION OF LOW GROWING (OR MAINTAINED) CONIFERS AND FLOWERING BUSHES IN FRONT OF WINDOWS.

A FLOWERING TREE, SUCH AS A KOREAN DOGWOOD, SHALL BE PLANTED 5 TO 10 FEET FROM THE NORTHEAST BUILDING CORNER.

PERENNIAL AND ANNUAL FLOWERS ARE TO BE PLANTED TO SUPPLEMENT THE TREES AND BUSHES.

**EAST PROPERTY LINE**  
THE GREEN AREA ALONG THE EAST PROPERTY LINE IS TO BE MAINTAINED AS LAWN IN FRONT OF THE BUILDING AND THE AREA ALONG THE SIDE AND TO THE REAR OF THE BUILDING IS TO BE ALLOWED TO REMAIN AS WOODS COMPOSED OF NATIVE SPECIES. THE WOODS SHOULD BE PRUNED AND THINNED TO MAINTAIN TREE HEALTH AND GROWTH AND TO ALLOW FOR SNOW STORAGE.

**DISPLAY PENNSULAR & VEHICULAR DISPLAY AREAS**  
THE DISPLAY PENNSULAR AND AREAS SHALL BE MAINTAINED AS HARDEN GRASS TO ALLOW ALL WEATHER FOOT ACCESS. SUITABLE MASONRY PADS SHALL BE PLACED TO SUPPORT VEHICLE WHEELS. PADS MAY BE INSTALLED TO ALLOW VEHICLES TO BE MOVED ON OR OFF THE PADS OR TEMPORARY MEASURES MAYBE UTILIZED. THE AREAS ARE TO APPEAR AS GRASSSED.

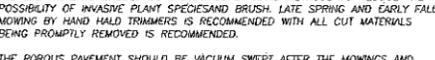
**EMBANKMENTS**  
THE EXISTING EMBANKMENT ALONG THE SOUTH PROPERTY LINE AND THE PROPOSED RAMP, INCLUDING ANY AREA THAT CANNOT BE MOVED BETWEEN THE RAMP AND SUBBURY ROAD IS TO BE MAINTAINED IN NATIVE GRASSES.

BRUSH SHALL BE REMOVED AND AREA SUBJECT TO OR WITH THE POTENTIAL FOR EROSION SHALL BE STABILIZED BY THE PLACEMENT OF A BIODEGRADABLE NET. TOPSOIL SHALL BE ADDED AS REQUIRED AND AREAS SEEDING WITH AN APPROPRIATE LOW MAINTENANCE SEED MIXTURE FOR DRY SITES, SUCH AS NE EROSION CONTROL/RESTORATION MIX FOR DRY SITES [NHEP.COM]

**MAINTENANCE [SEE "SITE MAINTENANCE FOR STORMWATER CONTROL"]**  
THE SITE MUST BE MAINTAINED LITTER FREE TO PROTECT THE WADABILITY OF THE PERVIOUS PAVEMENT AND TO DECREASE IMPACTS ON OTHER STORMWATER MANAGEMENT SYSTEMS.

THE EMBANKMENTS SHOULD BE MAINTAINED BY HAND METHODS TO REDUCE THE POSSIBILITY OF PROGRESSIVE SLIP. LATE SPRING AND EARLY FALL MOWING BY HAND HAYD TRIMMERS IS RECOMMENDED WITH ALL CUT MATERIALS BEING PROMPTLY REMOVED IS RECOMMENDED.

THE PERVIOUS PAVEMENT SHOULD BE VACUUM SWEEPED AFTER THE MOWINGS AND PERIODICALLY AS NECESSARY TO REMOVE MATERIALS CONTAINED IN VOIDS.



**ROOF RECHARGE TRENCH DETAIL**  
N.T.S.

**ZONING ANALYSIS**

POWDER MILL DISTRICT  
FLOOD PLAIN OVERLAY DISTRICT - GRAPHICALLY ON SITE  
145 ABOVE DAM  
138 BELOW DAM  
135 ABOVE BRIDGE

GROUNDWATER PROTECTION DISTRICT 3

DESCRIPTION	REQUIRED	EXISTING	PROPOSED
AREA - SF	10,000	38,900±	38,900±
FRONTAGE - FT	100	>100	>100
MINIMUM LOT WIDTH - FT	50	>50	>50
MINIMUM YARD DEPTH - FT			
FRONT - BUILDING	30	60±	>50
FRONT - PARKING	30	0	10±
SIDE	20	40±	40±
REAR	20	15±	20±
MINIMUM OPEN SPACE - %	35	<20	22
BUILDING FOOT PRINT - SF	NR	2780	<3,900
MAXIMUM FLOOR/AREA RATIO	0.20	-	-
NET FLOOR AREA ALLOWED - SF	7,250±	-	-
ADDITIONAL IMPERVIOUS AREA ALLOWED	1,200 SF	-	-

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**PLAN NOTES**  
PLAN WAS PREPARED FOR SUBMISSION OF REQUEST FOR DETERMINATION OF APPLICABILITY.

PLAN IS BASED ON PREVIOUS PREPARED SITE PLANS AND IS NOT THE RESULT OF AN ON THE GROUND INSTRUMENT SURVEY AND SHOULD BE CONSIDERED TO REPRESENT THE SITE IN A GENERAL MANNER.

NO ATTEMPT WAS MADE TO DETERMINE IF THE FACILITIES SHOWN ON THE PLAN CONFORM TO THE REQUIREMENTS OF PREVIOUS SITE PLANS OR OTHER ZONING REQUIREMENTS.

NO ATTEMPT WAS MADE TO ASCERTAIN THE PRESENCE OF UNDERGROUND UTILITIES OR STRUCTURES.

THE 200 FOOT RIPARIAN ZONE WAS DETERMINED BASED ON THE EDGE OF THE RIVER SHOWN ON PLANS FOR PROPERTIES ACROSS POWDER MILL ROAD. THE RIVER IS CONTAINED BY STONEWALLS AND THE LOCATION OF BORDERING VEGETATED WETLANDS, IF ANY, IS THE EDGE OF RIVER.

THE 100 YEAR FLOOD PLAIN ELEVATION VARIES FROM 137 TO 135 ABOVE THE POWDERMILL ROAD BRIDGE AND FROM 135 TO 133 BELOW. ELEVATION 134 APPEARS TO BE THE PROPER ELEVATION FOR THIS SITE.

ELEVATION DATUM HAS NOT BEEN VERIFIED.  
POWDERMILL AND SUBBURY ROADS HAVE BEEN RECONSTRUCTED SINCE THE PREPARATION OF THE PREVIOUS SITE PLANS.

**REQUEST FOR DETERMINATION OF APPLICABILITY PLAN FOR SITE IMPROVEMENTS**

45 POWDER MILL ROAD  
ACTON, MASSACHUSETTS

PREPARED FOR:  
SWANSON PONTIAC, BUICK & GMC  
12 SUBBURY ROAD  
ACTON, MA 01720

SCALE: 1"=20'  
DATE: MAY 15, 2013

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PH. (978) 263-3666  
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