

**EROSION AND SEDIMENTATION CONTROL**

**GENERAL**

A rapid and well ordered construction project of this site resulting in the limitation of extent and time in which surfaces are not erosion resistant shall be the primary erosion and sedimentation control method utilized at this site.

The flat slopes and heavy vegetation between the area of construction and the wetlands at the rear of the property should limit the possibility of products of erosion impacting the wetland.

The transport of or tracking of earth to Central Street where it could be "washed" to catch basins or wetland resource areas is of greater concern.

The area of disturbance shown on the plans is less than one acre. Disturbance of over one acre requires a filing with US EPA.

**CLEARING**

Prior to clearing the limit of work shall be demarcated. Invasive vegetation shall be removed and transported off site for disposal by incineration. All other vegetation shall be removed and disposed of within one week of cutting, except woodchips which should be retained on site for erosion control.

**EROSION BARRIERS**

A double row of silt fences shall be installed at the rear of the property and its toe sealed with wood chips.

The existing Pine Ridge Road driveway shall be used for access and double rows of sand bag dikes shall be placed across the bottom to divert runoff to a basin formed by placing sand bags in a "U" shape. The capacity of the basin will be minimal and earthen products must be removed from the driveways and the area tributary to the sand bags must be kept stable or materials will be transported beyond the sand bags.

A broom and shovel shall be kept at the site for policing the driveway and Central Street.

Temporary construction entrances or tracking pads are shown and their locations must be adjusted to correspond with changes in site conditions.

Silt fences and sand bag check dams shall be installed as necessary to decrease the concentration of runoff and transport of products of erosion.

**SITE CONSTRUCTION**

The existing house shall be removed with allowances for proper dust control and be removed from site simultaneously with its demolition. Materials shall not be piled on site.

Building materials shall be stored in a manner that will not concentrate runoff and create unnecessary traffic. Containers shall be utilized for refuse except liquid wastes which shall be placed in sealed containers and transported offsite for required disposal.

The site shall be kept neat and litter free.

The area of disturbance required for the subsurface sewage disposal is a significant portion of the site and the construction of the system shall be scheduled so it can be accomplished and made erosion resistant in a short time period. Stabilization of its surface with an annual cover shall be done if permanent stabilization is not possible.

Driveways shall be brought to binder course as soon as possible to limit rutting. The placement of pavement will enhance the transport of products of erosion from tributary surfaces and efforts shall be made to limit runoff, control erosion and capture materials prior to their reaching the pavements.

Stabilization shall be an on going process and not be delayed until final landscaping. Topsoil has a high erosion potential.

**RECHARGE SYSTEMS**

Stormwater management for the site is accomplished by drip line recharge trenches at the houses and recharge trenches along portions of the driveway. The long term viability of these facilities will be adversely impacted if products of erosion reached them.

Prior to the construction of the recharge facilities areas tributary to them shall be made erosion resistant and barriers such as sand bag dikes shall be installed as required to provide necessary protections.

After there installation the site shall be maintained to limit the transport of soil, debris and landscape litter to the recharge trenches.

**RECHARGE SYSTEM OPERATION AND MAINTENANCE**

The recharge systems have been designed to require limited maintenance if the surfaces tributary to them are kept erosion resistant and free of materials [leaf litter, sand for ice control, etc.] that could be transported by runoff to the trenches.

Noticeable amounts of sand and debris located on the driveways shall be promptly removed and properly disposed of.

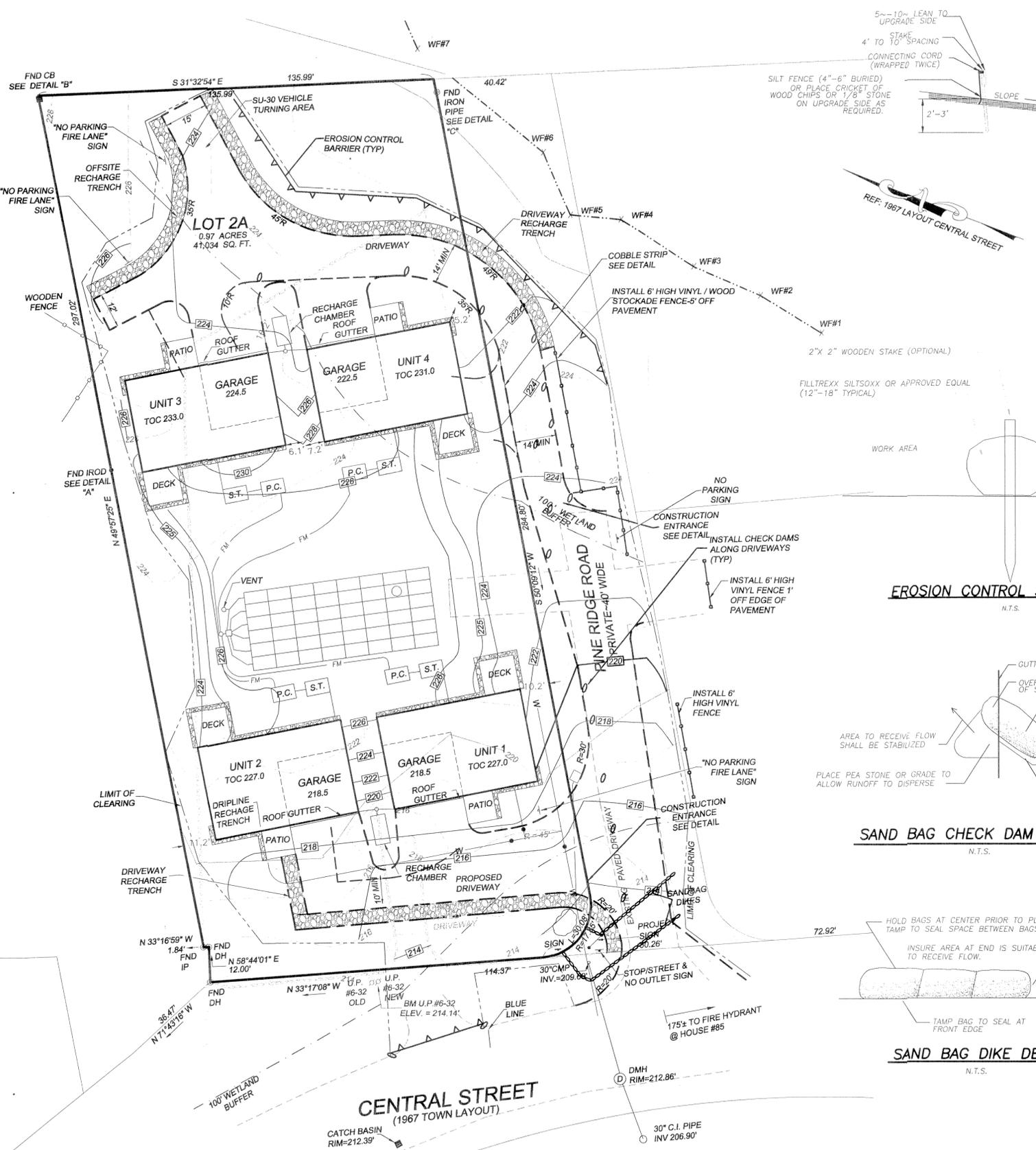
The concrete structure located above the bottom driveway on Pine Ridge is a catch basin installed to removed materials from the runoff flowing down Pine Ridge. The catch basin has a four foot deep sump to retain sand and other debris and the piped outlet is arranged to retain oil and other materials that float on the water surface.

The catch basin should be cleaned on an annual basis by a licensed person and observed each quarter to determine if additional cleaning is required by passing a dipstick through the open grate and measuring the depth of water. If debris is not present the depth of water will be four feet. If the depth of water is less than three feet, then there is over a foot of debris and the basin should be cleaned.

When the dipstick is removed its surface should be inspected for the presence of oil and if such materials are detected the catch basin shall be cleaned.

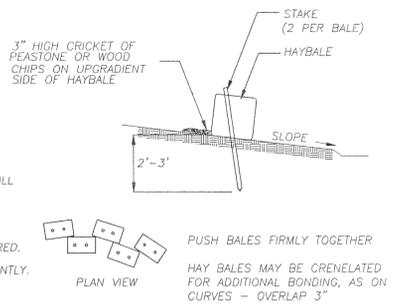
If the recharge trenches are observed to be overflowing they should be monitored to determine if this is a common occurrence. If it is found that it is common their replacement by excavation and placement of new stone shall be planned.

Each driveway trench has two monitoring wells. The wells are locate in areas where the recharge well extends to a depth of three feet. The water level in the wells should be one foot or less from the surface shortly after rain storms. If it is found to be higher, then renovation of the trenches should be planned.



**NOTES:**

1. FENCES SHALL BE LOCATED AT LIMIT OF WORK, OR AS SHOWN ON PLANS.
2. PENETRATE OR "SNUG" GROUND WITH BOTTOM FOR ENTIRE LENGTH.
3. DO NOT INSTALL IN A MANNER WHICH WILL CONCENTRATE RUNOFF.
4. BACK FENCE WITH STAKED HAYBALES IN HIGH RISK AREAS.
5. MAINTAIN AND REMOVE FENCE AS REQUIRED.
6. REMOVE PRODUCTS OF EROSION FREQUENTLY.



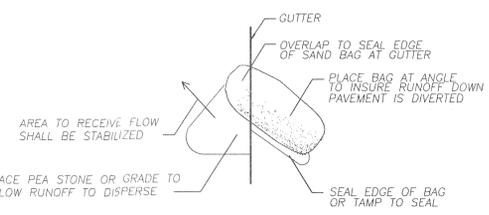
**EROSION CONTROL BARRIER**  
(TWO ALTERNATIVES)  
N.T.S.

**NOTES:**

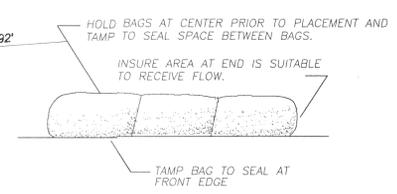
1. STONE SHALL BE 1-3" IN SIZE AND INSTALLED TO REMOVE AND ENTRAP MATERIALS FROM TIRES AND NOT BE TRANSPORTED TO ROAD.
2. STONE SHALL EXTEND ACROSS FULL WIDTH OF ENTRANCE AND BE OF SUFFICIENT LENGTH TO PRECLUDE MUD FROM REACHING ROAD.
3. STONE SHALL BE REPLACED AS REQUIRED TO INSURE MUD REMOVAL.

**TEMPORARY CONSTRUCTION ENTRANCE**  
N.T.S.

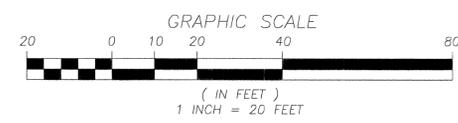
**EROSION CONTROL SOCK DETAIL**  
N.T.S.



**SAND BAG CHECK DAM DETAIL**  
N.T.S.



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



No.	DATE	DESCRIPTION
3	1/6/10	TOWN COMMENTS
2	11/2/09	TOWN COMMENTS
1	9/29/09	TOWN COMMENTS

**REVISIONS**

**EROSION AND SEDIMENTATION CONTROL PLAN—MARSH VIEW**

93 CENTRAL STREET  
ACTON, MA

PREPARED FOR:  
WESTCHESTER HOMES, INC.  
30 NAGOG PARK, SUITE 225  
ACTON, MA 01720

SCALE: 1"=20' DATE: JUNE 19, 2009

**Acton Survey & Engineering, Inc.**  
Since 1967

97 GREAT ROAD  
P.O. BOX 666  
ACTON, MA 01720  
PH. (978) 263-3666  
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**NOTE:** THE CENTRAL STREET DRAINAGE SYSTEM AND RIGHT-OF-WAY IN FRONT OF THE SITE SHALL BE CLEANED PRIOR TO AND MAINTAINED AS SUCH DURING CONSTRUCTION - SEE GENERAL NOTES

ENDORSEMENT PERTAINS TO EXISTING CONDITIONS ONLY  
*Douglas W. Andrusick* 8/9/10  
PROFESSIONAL LAND SURVEYOR DATE

*[Signature]*  
8-9-10

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