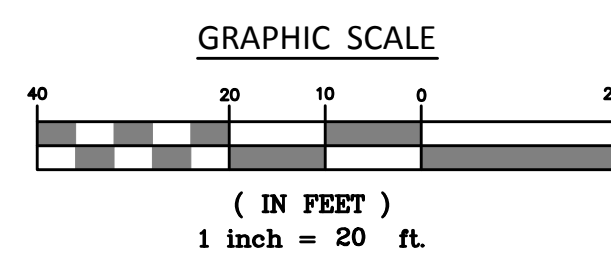
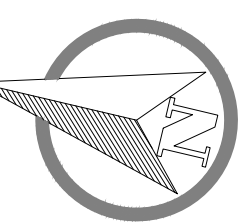


Call Before You Dig: 1-800-922-4455
(See Survey Note #3)



TOWN OF LISBON
Lisbon Central School and Community Track
15 Newent Road - Lisbon, Connecticut
Proposed Site Improvements



SCALE:	1" = 20'
DATE:	August 25, 2014
JOB I.D. NO.	09-1739-1
Revisions	

SHEET NO.

SECONDARY CONSTRUCTION SITE ACCESS
NOT TO BE USED FOR CONSTRUCTION EQUIPMENT
OR THE DELIVERY OF CONSTRUCTION MATERIALS.
SECONDARY CONSTRUCTION ACCESS TO BE LIMITED TO
THIS LOCATION AND WORK ASSOCIATED WITH THE CATCH
BASIN AND GRASS SWALE. ALL DISTURBED AREAS TO BE
RESTORED TO PRECONSTRUCTION SITE CONDITIONS.

200 METER TRACK SURFACE:
THE TRACK SURFACE IS TO BE PROTECTED AT ALL
TIMES AND REMAIN UNDISTURBED THROUGHOUT
CONSTRUCTION. THIS WILL INCLUDE BUT NOT BE
LIMITED TO "NO VEHICLES ON OR CROSSING"
AND "NO MATERIAL STORAGE".

PROVIDE AND MAINTAIN AN INLET SEDIMENT
CONTROL DEVICE FOR ALL OPEN TOP DRAINAGE
STRUCTURES LOCATED WITHIN PROPOSED
DISTURBED AREAS (TYP. FOR 3) (SEE DETAIL).

ALL DISTURBED AREAS TO BE LOAMED,
SEEDED AND MULCHED (SEE DETAIL).

PROVIDE AND MAINTAIN A CONTINUOUS LINE
OF HAY BALES OR SILT FENCE (220'±)
THROUGHOUT CONSTRUCTION (SEE DETAIL).

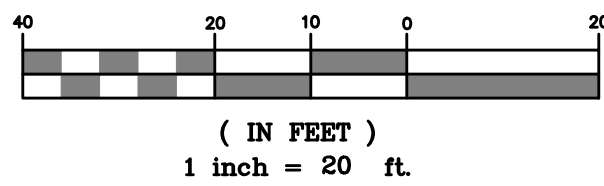
PROPOSED LIMITS OF CONSTRUCTION ACTIVITY;
PROVIDE 420' CONSTRUCTION FENCING
(4" HIGH ORANGE SNOW FENCE)

ALL DISTURBED AREAS TO BE LOAMED, SEEDED
AND MULCHED. SLOPED PORTIONS TO BE
STABILIZED WITH JUTE NETTING (SEE DETAILS)

PRIMARY CONSTRUCTION SITE ACCESS
PRIMARY CONSTRUCTION ACCESS TO BE LIMITED TO THIS
LOCATION AND THE DRIVEWAY SERVING THE PUBLIC WORKS
DEPARTMENT LOCATED ALONG THE WESTERLY SIDE OF THE
BUILDING. THE ACCESS DRIVEWAY SHALL NOT BE IN USE
DURING OUTDOOR SCHOOL ACTIVITIES. ALL DISTURBED AREAS
TO BE RESTORED TO PRECONSTRUCTION SITE CONDITIONS.

UNDERGROUND SEPTIC TANK LOCATIONS
CONTRACTOR IS RESPONSIBLE FOR LOCATING TANKS AND
PROTECTING THEM THROUGHOUT CONSTRUCTION. THIS SHOULD
INCLUDE NO MATERIAL STORAGE ON TOP OF THIS AREA AND
NO CONSTRUCTION EQUIPMENT PASSING OVER THEM.

GRAPHIC SCALE



LANDSCAPE SCHEDULE

Symbol	Botanical Name	Common Name	Size	Quantity
Jp	Juniperus squamata 'Blue Star'	Blue Star Juniper	2 gal.	23
Fp	Pennisetum setaceum 'Rebrum'	Dwarf Fountain Grass	2 gal.	4
Pr		Perennial Mix (See Note #1)	2 gal.	140

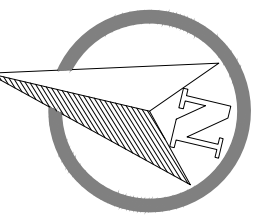
- Notes:
- The contractor is to provide a schematic layout for the proposed Perennial Mix area using the allotted plant quantity and size.
 - Sod and all associated root systems to be removed from all planter bed areas.
 - All planter beds are to be prepared for plants in accordance with the project specifications.
 - Provide **Cobra Landscape Edging**, or equal along the entire easterly and southerly limits of the landscaped area.

PLANTING SPECIFICATIONS

- All plants shall be nursery grown and conform to the latest edition of ANSI 260.1, AMERICAN STANDARD FOR NURSERY STOCK and also the minimum guidelines established for nursery stock published by the American Association of Nurserymen, Inc.
- No substitution of plant materials will be allowed without the prior written consent of the Project Owner.
- Planting mixture for trees and shrubs: 1 part dehydrated cow manure or composted organic material, 2 parts peat moss, 5 parts topsoil
- Fertilizer: to be complete plant food with a guaranteed analysis of 10-10-10 unless otherwise approved by the landscape architect. Fertilizer shall contain 50% slow release nitrogen and 50% quick release nitrogen.
- All plant pits must be free draining. Break up the bottom of the hole by fork if necessary to ensure plant has proper drainage.
- Set all plants in center of plant pits, plumb and straight and as detailed on the drawing. All plant material shall bear the same relationship to finished grade as to original planting grade prior to digging. Trees shall be planted with the junction of roots and stem level with finished grade.
- Handle balled and burlapped plants from the ball only. Once positioned in the hole, remove the top 1/3 of the burlap from the root ball without disturbing the roots.
- Face each plant to give the best appearance.
- Fill plant pits 2/3 their depth with prepared planting mixture, water thoroughly and allow to settle. Complete back-filling, water thoroughly to eliminate any voids and air pockets. Provide additional back-fill as necessary to conform to required elevation and as detailed.
- Form saucer and install mulch over entire plant pit and saucer area as detailed.
- 3 inches shredded hemlock bark mulch or equal shall be used around all trees and shrub plantings.
- All plants shall be guaranteed for a period of one full year after inspection and acceptance by the Owner's representative, and shall have at least 80% healthy growth at the end of the guarantee period.

VERSA-LOK RETAINING WALL EXTENSION

NOT TO SCALE



Erosion and Sediment Control
Best Management Practices (BMP'S)

Minimize Disturbed Area and Protect Natural Features and Soil:

Topsoil:

Topsoil will be removed and stockpiled on site and utilized for final grading. Additional topsoil, if required will be supplied from an off-site source. Excess materials resulting from "cut slopes" in the areas of the proposed construction that are not intended for reuse will be immediately removed from the site. When soil is stockpiled, the slope of the stockpile will not exceed 2 horizontal to 1 vertical.

Installation Schedule: As noted, excavated topsoil will be stockpiled on site. Silt fence will be placed around any stockpiles that are not immediately removed from the site to protect the existing drainage ditches and off site areas.

Maintenance and Inspection: The cut and fill areas will be inspected weekly for erosion. These areas will be stabilized immediately with erosion controls or graded to avoid possible disturbance to the existing drainage ditches or off site areas. See also maintenance and inspection procedures for silt fence.

Control Stormwater Flowing Onto and Through the Project:

Area for Silt to accumulate:

BMP/Installation Schedule: Before any grading operations begin, a wood chip filter berm or silt fence backed by hay bales will be installed adjacent to the areas under construction just outside the limits of disturbance.

Other adjacent off site areas will always be protected by a silt fence or another BMP until final stabilization is achieved.

Maintenance and Inspection: The graded areas and silt fence will be inspected weekly to ensure that there are no structural failures and immediately after rain events.

Construction Specifications

Silt Fence

- The material for silt fences should be a pervious sheet of synthetic fabric such as polypropylene, nylon, polyester, or polyethylene yarn.
- If a standard-strength fabric is used, it can be reinforced with wire mesh behind the filter fabric. This increases the effective life of the fence.
- The stakes used to anchor the filter fabric should be wood or metal. Wooden stakes should be at least 5 feet long and have a minimum diameter of 2 inches if a hardwood like oak is used. Stakes from soft woods like pine should be at least 4 inches in diameter.
- Erect silt fence in a continuous fashion from a single roll of fabric to eliminate gaps in the fence. If a continuous roll of fabric is not available, overlap the fabric from both directions only at stakes or posts. Overlap at least 6 inches. Excavate a trench to bury the bottom of the fabric fence at least 6 inches below the ground surface. This helps to prevent gaps from forming near the ground surface. Gaps would make the fencing useless as a sediment barrier.
- The height of the fence posts should be 16 to 34 inches above the original ground surface. If standard-strength fabric is used with wire mesh, space the posts no more than 10 feet apart. If extra-strength fabric is used without wire mesh reinforcement, space the posts no more than 5 feet apart.
- The fence should be designed to withstand the runoff from a 10-year peak storm event. Once installed, it should remain in place until all areas upslope have been permanently stabilized by vegetation or other means.

Installation:

- Dig a 6" deep trench on the uphill side of the proposed barrier location.
- Position the posts on the downhill side of the fabric barrier and drive the post 1.5 feet into the ground.
- Lay the bottom 6" of the fabric barrier in the trench to prevent undermining and backfill.

Maintenance:

- Sediment should be removed once it has accumulated to one-third to one-half the original height of the barrier.
- Filter fabric should be replaced whenever it has deteriorated to such an extent that the effectiveness of the fabric is reduced (approximately six months).
- Silt fence should remain in place until disturbed areas have been permanently stabilized.
- All sediment accumulated at the fence should be removed and properly disposed of before the fence is removed.

Inspection:

- Inspect silt fence before anticipated storm events (or series of storm events such as intermittent showers over one or more days) and within 24 hours after the end of a storm event of 0.5 inches or greater, and at least twice every seven calendar days, at least 72 hours apart.
- Where sites have been finally or temporarily stabilized, such inspections may be conducted only once per month.

Hay Bale Barrier

Installation

- Excavate trench 4" and place material upslope of trench.
- Place bales in a single row in the trench, lengthwise, with ends of adjacent bales tightly abutting one another and the bindings oriented around the sides rather than along the tops and bottoms of the bales (to avoid premature rotting of the bindings).
- Anchor each bale with at least 2 stakes, driving the first stake in each bale toward the previously laid bale to force the bales together. Stakes must be driven a minimum of 18 inches into the ground. Fill any gaps between the bales with hay or straw to prevent water from escaping between the bales.
- Backfill the bales with the excavated trench material to a minimum depth of 4 inches on the uphill side of the bales. Tamp by hand or machine and compact the soil. Loose hay or straw scattered over the disturbed area immediately uphill from the hay bale barrier tends to increase barrier efficiency.

Maintenance

- Inspect the hay bale barrier at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs. For dewatering operations, inspect frequently before, during, and after pumping operations. Remove the sediment deposits or install a secondary barrier upslope from the existing barrier when sediment deposits reach approximately one half the height of the barrier.
- Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because:
 - the barrier has been overtopped, undercut or bypassed by runoff water,
 - the barrier has been moved out of position, or
 - the hay bales have deteriorated or been damaged.
- When repetitive failures occur at the same location, review conditions and limitations for use and determine if additional controls are needed to reduce failure rate or replace hay bale barrier.
- Maintain the hay bale barrier until the contributing area is stabilized. After the upslope areas have been permanently stabilized, pull the stakes out of the hay bales. Remove sediment.

Storm Drain Protection:

Drop Inlet Protection:

BMP Description: Any proposed on-site storm drain inlets will be protected with Silt Filter Fence or a Filter Fabric Insert as detailed in the Erosion Control Plan as soon as these facilities are installed. Any existing storm drain inlets are to be protected similarly if receiving runoff from un-stabilized areas.

Construction Specifications

1. Silt Fence Drop Inlet Protection

- Silt Fence shall conform to the construction specifications for extra strength found in Table 1 and shall be cut from a continuous roll to avoid joints.
- For stakes, use 2 x 4-inch wood (preferred) with a minimum length of 3 feet.
- Space stakes evenly around the perimeter of the inlet a maximum of 3-feet apart, and securely drive them into the ground, approximately 18-inches deep.
- To provide needed stability to the installation, frame with 2 x 4-inch wood strips around the crest of the overflow area at a maximum of 1-1/2 feet above the drop inlet crest.
- Place the bottom 12 inches of the fabric in a trench and backfill the trench with 12 inches of compacted soil.
- Fasten fabric securely by staples or wire to the stakes and frame. Joints must be overlapped to the next stake.
- It may be necessary to build a temporary dike on the down slope side of the structure to prevent bypass flow.

2. Filter Fabric Insert:

Follow specifications described by the product manufacturer for effective installation. A detail for the Dandy Bag II is included in the Erosion Control Plan as an example of an acceptable filter.

Maintenance

- Sediment should not be allowed to wash into the storm drain inlet. It should be removed from the inlet protection and disposed of and stabilized so that it will not enter the inlet again.
- When the contributing drainage area has been permanently stabilized, all materials and any sediment should be removed, and either salvaged or disposed properly.
- Expected life of a silt fence barrier is 3 months. Maintenance needs and repairs should be accomplished immediately should the inlet protection fail.

Inspection

- Inspections of storm drain inlet protection methods should be made before anticipated storm events (or series of storm events such as intermittent showers over one or more days) and within 24 hours after the end of a storm event of 0.5 inches or greater, and at least twice every seven calendar days, at least 72 hours apart.
- Where sites have been finally or temporarily stabilized, such inspections may be conducted only once per month.

Soil Stabilization:

Temporary Stabilization:

BMP Description: Hydromulching will be used on slopes where construction will cease for more than 14 days and over the winter months to stabilize erodible materials. Straw mulch and wood fiber will be mixed with a tackifier and applied uniformly by machine with an application rate of 2 tons (100-200 bales) per acre. The contractor will use crimping equipment to bind the mulch to the soil if the tackifier is not effective. Netting will be used on small areas with steep slopes. In areas where hydromulching is inaccessible, straw mulch will be applied by hand at the same application rate.

Temporary Seeding will be used on any area where construction activity is suspended for more than twenty-one days to stabilize erodible materials. Refer to the Erosion Control Plan for guidance on seeding mixtures, rates, and acceptable planting dates for temporary seeding.

Installation Schedule: Portions of the site where construction activities will temporarily cease for more than 14 days will be stabilized with mulch. Where construction activities will temporarily cease for more than 21 days it will be temporarily seeded. Winter stabilization will be provided between December 25 and March 30.

Maintenance and Inspection: Mulched areas will be inspected weekly to ensure that adequate coverage is provided. Repairs will be conducted as needed.

Permanent Stabilization:

Permanent stabilization will be completed within 14 days after the site is brought to its final grades. Once the topsoil has been spread, all stones two inches or larger in any dimension will be removed as well as any debris. Apply agricultural ground limestone at the rate of two tons per acre or 100 lbs. per 1000 s.f. Apply 10-10-10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per s.f. Work limestone into the soil to a depth of 4 inches. Inspect seeded before seeding. If traffic has compacted the soil, retille compacted areas. Following seeding firm seed bed with a roller. Mulch with weed free straw immediately following seeding. If a permanent vegetative stand cannot be established by September 30, apply a temporary cover of the topsoil.

Seed Mixture:

Seed Mix Upland Areas	Lbs. per Acre	Lbs. per 1000 SF
Kentucky Bluegrass	20	0.45
Creeping Red Fescue	20	0.45
Perennial Ryegrass	5	0.10

Recommended Seed Dates:

April 1 – June 15 and August 1 – September 15

Maintenance and Inspection: All areas will be inspected weekly during construction for failure until a dense vegetation cover has been established.

Dust Control:

Dust from the site will be controlled by using a mobile pressure-type distributor truck that will apply potable water at rate of 300 gallons per acre and minimized as needed to avoid ponding.

Installation Schedule: Dust control will be implemented as needed once site grading has been initiated, and during windy conditions exceeding 20mph, while site grading is occurring. Spraying of potable water will be performed once per day during the months of March through May and no more than three times per day from June to September or whenever dryness of soil warrants it.

Maintenance Schedule: At least one mobile unit will be available at all times during construction to apply potable water. Each mobile unit shall be equipped with a positive shutoff valve to prevent over watering of disturbed areas.

