

# TEMPORARY & PERMANENT EROSION & SEDIMENT CONTROL

## General

This plan has been developed to provide a strategy for dealing with soil erosion and sedimentation during and after the driveway construction on East Kidder Street. This plan is based on the Standards and Specifications for Erosion Prevention as contained in the Maine Department of Transportation (MaineDOT) Standard Specifications (MaineDOT 1993) and Sediment Control Handbook for Construction: Best Management Practices (EPA 1993).

## Construction Phase

In order to protect the soil, water, wetland, and wildlife resources of the area, only those areas designated to be disturbed shall be disturbed.

The following measures shall be mandatory and the responsibility of the Contractor:

1. Those areas undergoing actual construction will be left in an undisturbed or unvegetated condition for a minimum of 14 days from final grading of the storm water lagoon will be stopped for future use and stockpiles shall be determined by the City Inspector and Project Engineer at the time of construction.
2. Prior to clearing and grubbing the site, hay bales and/or filter fabric will be installed and stocked across culverts and catch basins.
3. Prior to clearing and grubbing, filter fabric fencing or hay bale barriers will be staked across the slopes, properly installed and maintained throughout construction and/or just above any downslope adjacent to construction.
4. Stabilized construction entrances shall be constructed for ingress and egress from the project site prior to construction.
5. Check dams shall be placed in all drainage ditches not otherwise protected from erosion control measures.
6. All drainage ditches over 5 percent shall have stone lined centers.
7. All hay bale barriers and silt fencing shall be inspected, replaced, and/or repaired weekly, or as needed immediately following any significant rainfall, or when sediment reaches 1/3 the barrier height.
8. When work is immediately adjacent to the existing wetland, the construction site must be stabilized prior to the end of the work day.
9. If final seeding of the disturbed areas is not completed by September 15th of the year of construction, then on that date these areas will be graded and smoothed, then seeded to a winter cover crop of Rye grass. The seeding will proceed by an application of 3 tons of lime and 100lbs. of 10-10-10 fertilizer per acre, or its equivalent. If the rye seeding does not make adequate growth to provide at least 75% vegetative cover by November 30th, then on that date temporary mulch of hay will be applied to seeded areas. Seeding of disturbed areas shall be completed by the end of the year of construction. The seeding plan for permanent seeding the following spring. Final vegetation of the site shall not cover over at least 90% of its surface.
10. During the construction phase, intercepted sediment will be returned to the site and/or disposed onto open areas. The disposal of post seeding sediment, if any shall, be the responsibility of the Contractor.
11. Temporary mulch will be applied to all exposed soil surfaces within seven (7) days or prior to any storm event.

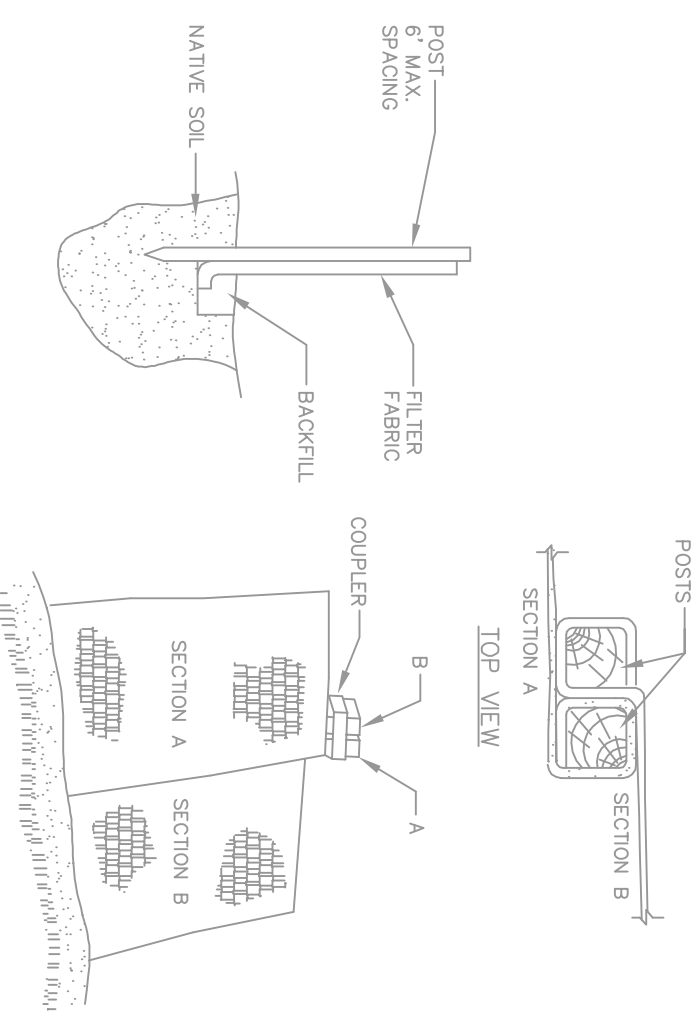
## Vegetation Plan

Revegetation measures will commence immediately upon completion of construction except as noted. Areas not to be seeded or planted shall be stabilized as follows:

1. Four inches of loam will be spread over disturbed areas and smoothed to a uniform surface.
2. In lieu of soil tests, agricultural limestone will be spread at the rate of three tons per acre. 10-20-20 fertilizer will follow at a rate of 800 lbs per acre. These two soil amendments will be incorporated into the soil prior to installing plantings.
3. Following seed bed preparation, the landscaped areas shall be planted as shown on the following plans. All other areas shall be seeded with roadside mixture #3 as specified in MDOT 717.03.
4. All areas designated for seeding (i.e. side slopes, embankments, swales, etc.) shall be covered with a bonded fiber matrix such as Weyheuser SOIL GUARD or an approved equivalent. The bonded fiber matrix shall not be applied immediately after grading. The bonded fiber matrix shall be applied immediately after grading and after stabilization of the soil. The bonded fiber matrix shall be applied in accordance with the manufacturer's instructions. The bonded fiber matrix (Road-side Mixture Number 2 as specified in MDOT 717.03) can be all be mixed together with the SOIL GUARD and hydraulically applied as part of the same application.
5. All hay bales, filter fabric barriers and stone check dams will remain in place until seedlings have become 75% established and then removed with in 10 days.

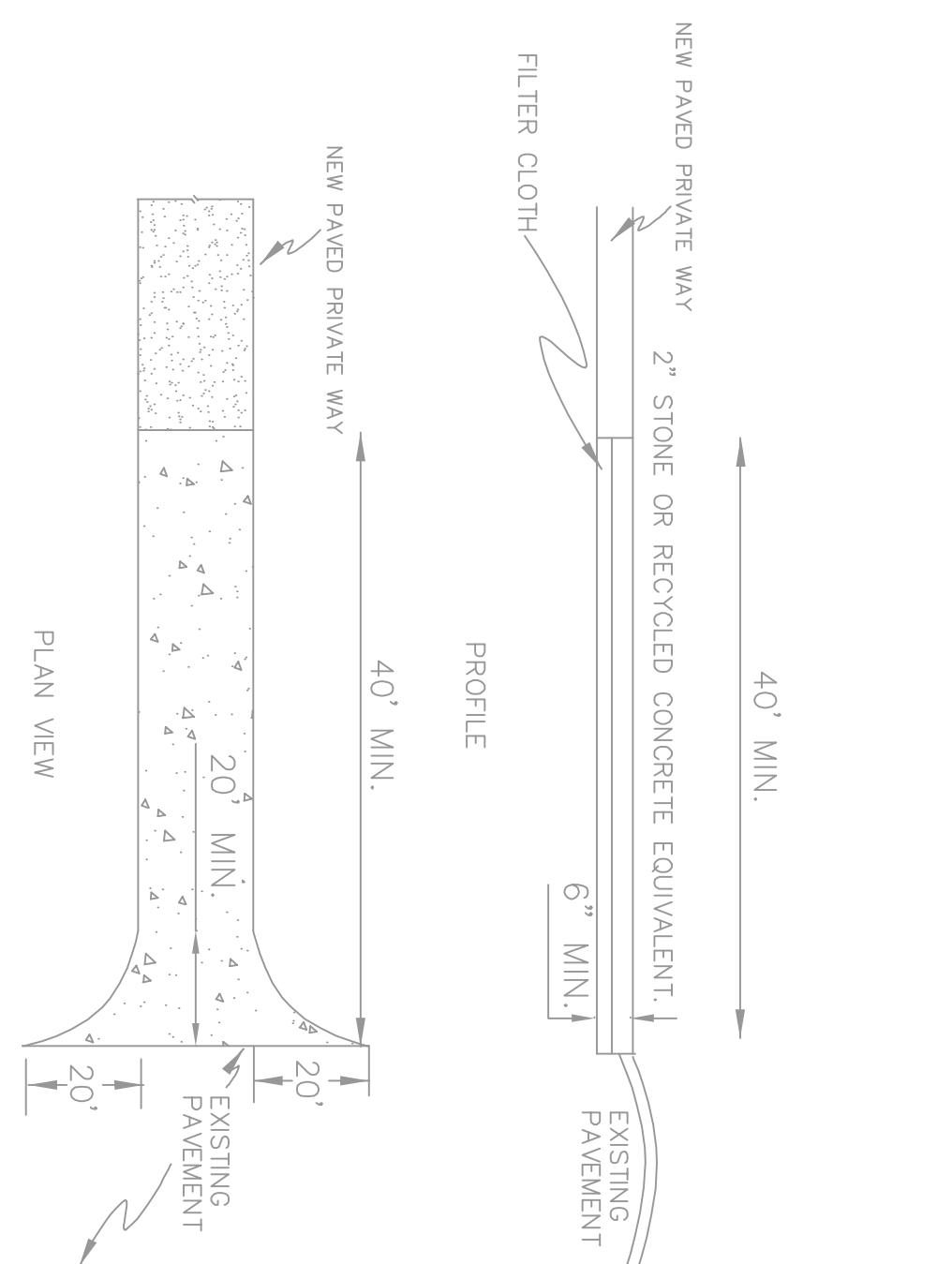
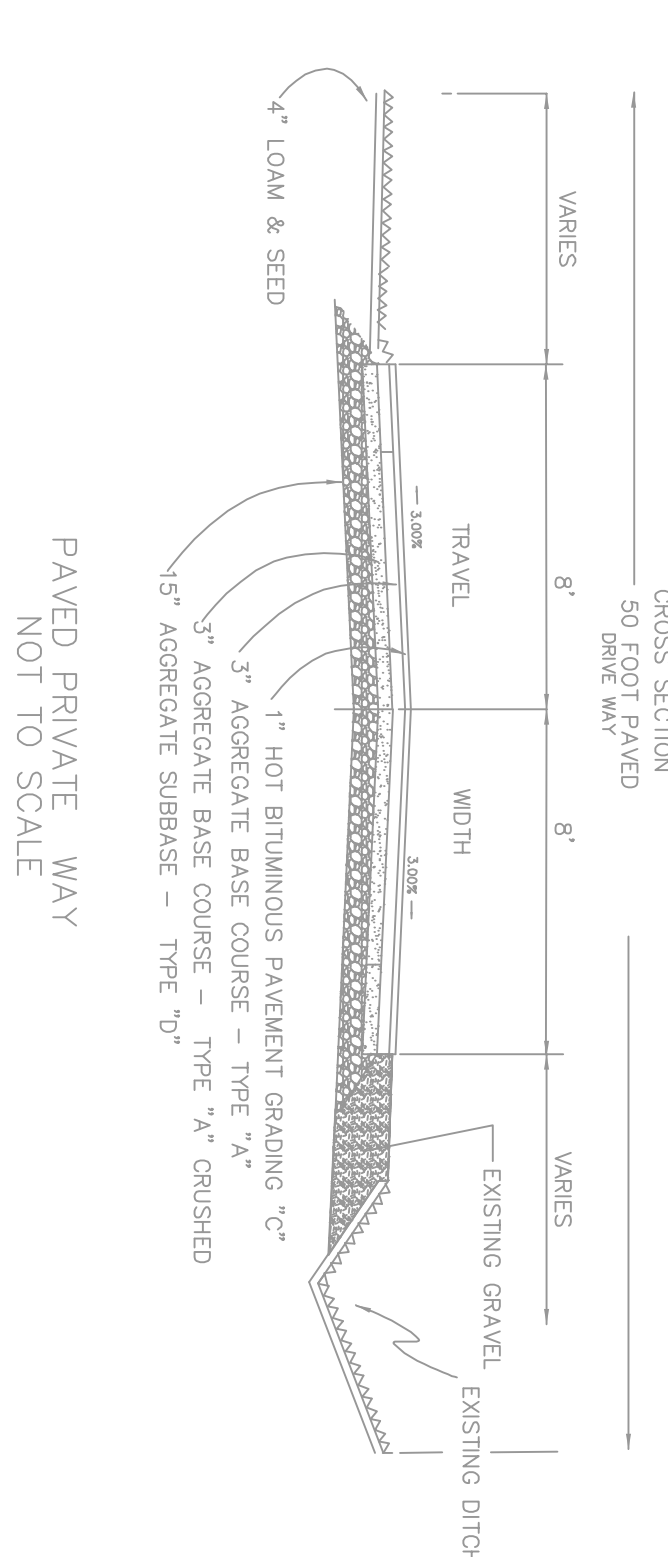
## Monitoring

Watercourse inspectors will be notified as needed during the entire construction cycle. Weekly and after each rainfall, a visual inspection will be made of all included erosion control measures and repairs will be made as needed to insure their continuing function as designed. Erosion control measures shall be inspected and repaired as needed. Erosion control measures have been established. Established means a minimum of 75% of area vegetated with vigorous growth. Seeding will be carried out, with a minimum of inspection, in the event of only sparse growth. Seeding measures will be removed within 10 days when vegetation is adequately established.

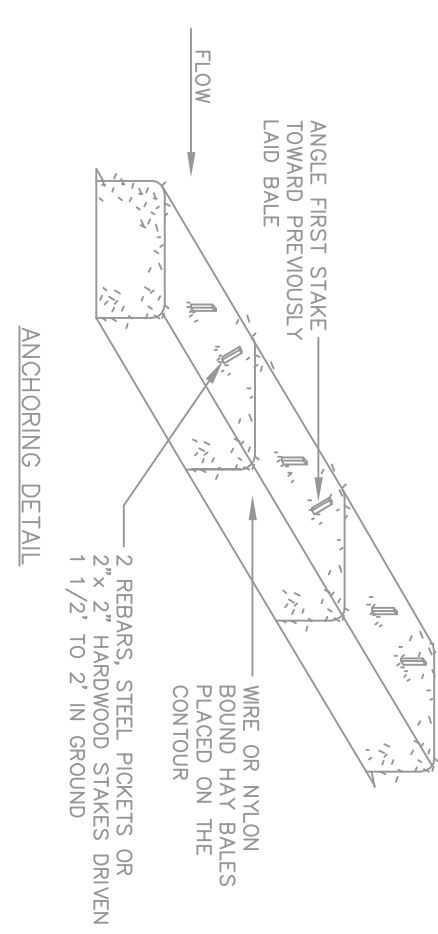
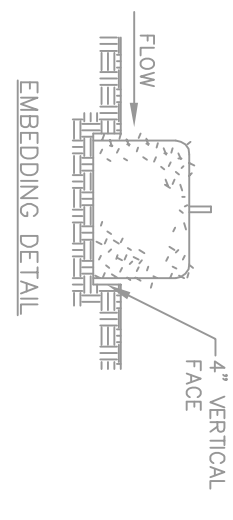


- ### INSTALLATION:
1. EXCAVATE A 6" X 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
  2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
  3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS DOWN ON THE TRENCH BOTTOM, FOR SECTION AS SHOWN ABOVE.
  4. LAY THE TOP-LAY OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
  5. BARRIER SHALL BE WEAR SILT FENCE OR APPROVED EQUAL.

FILTER BARRIER  
NOT TO SCALE

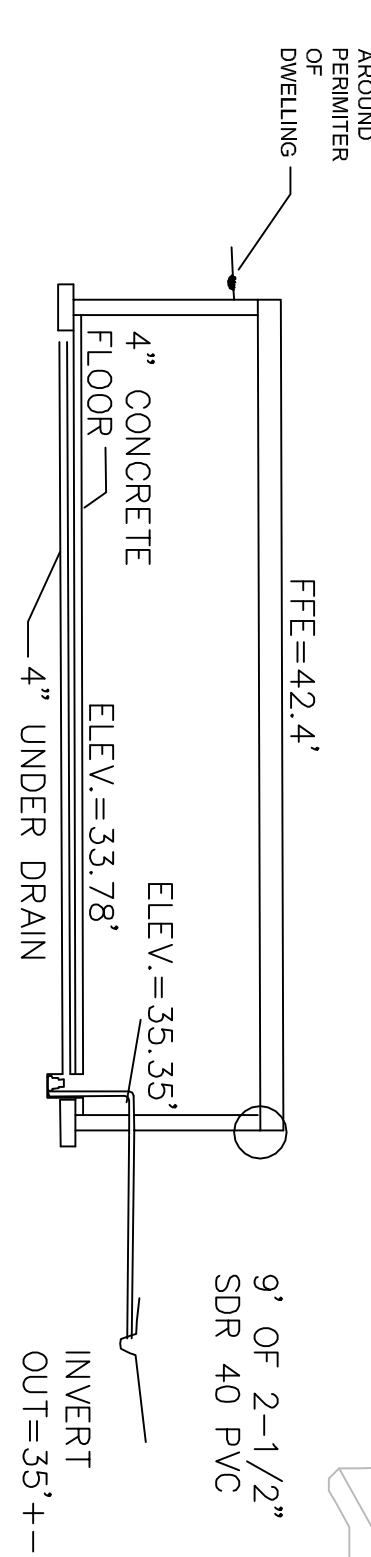


STABILIZED CONSTRUCTION ENTRANCE  
NOT TO SCALE

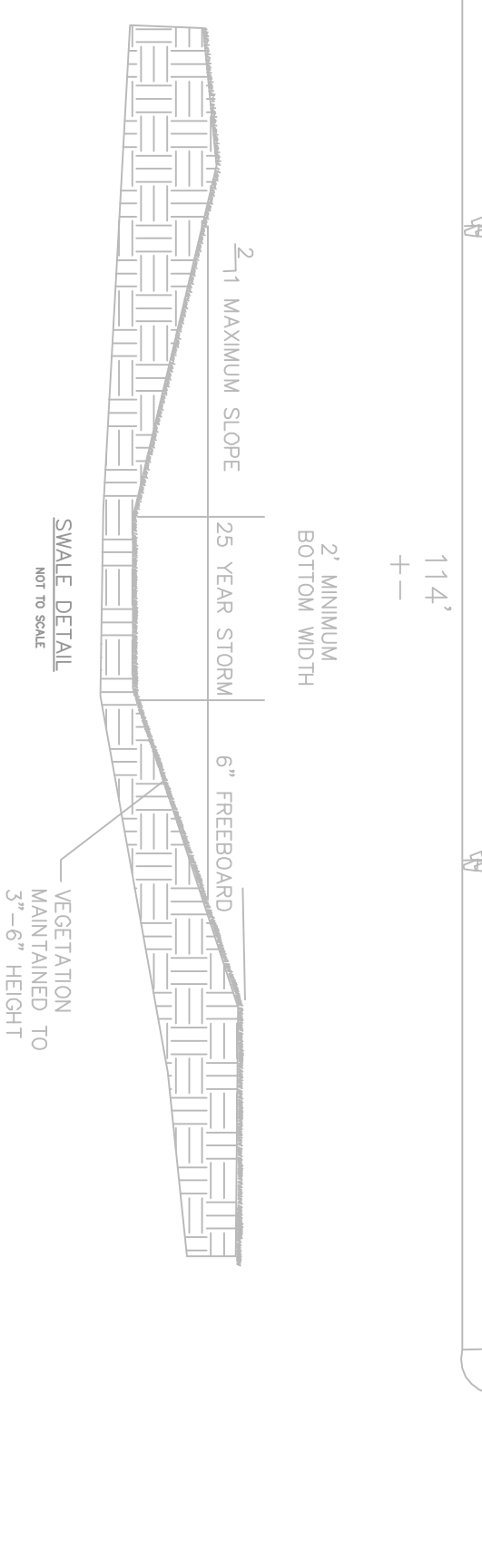


- ### NOTES:
1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ADJUTING THE ADJACENT BALES.
  2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
  3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
  4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS DIRECTED BY PROJECT ENGINEER.
  5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.

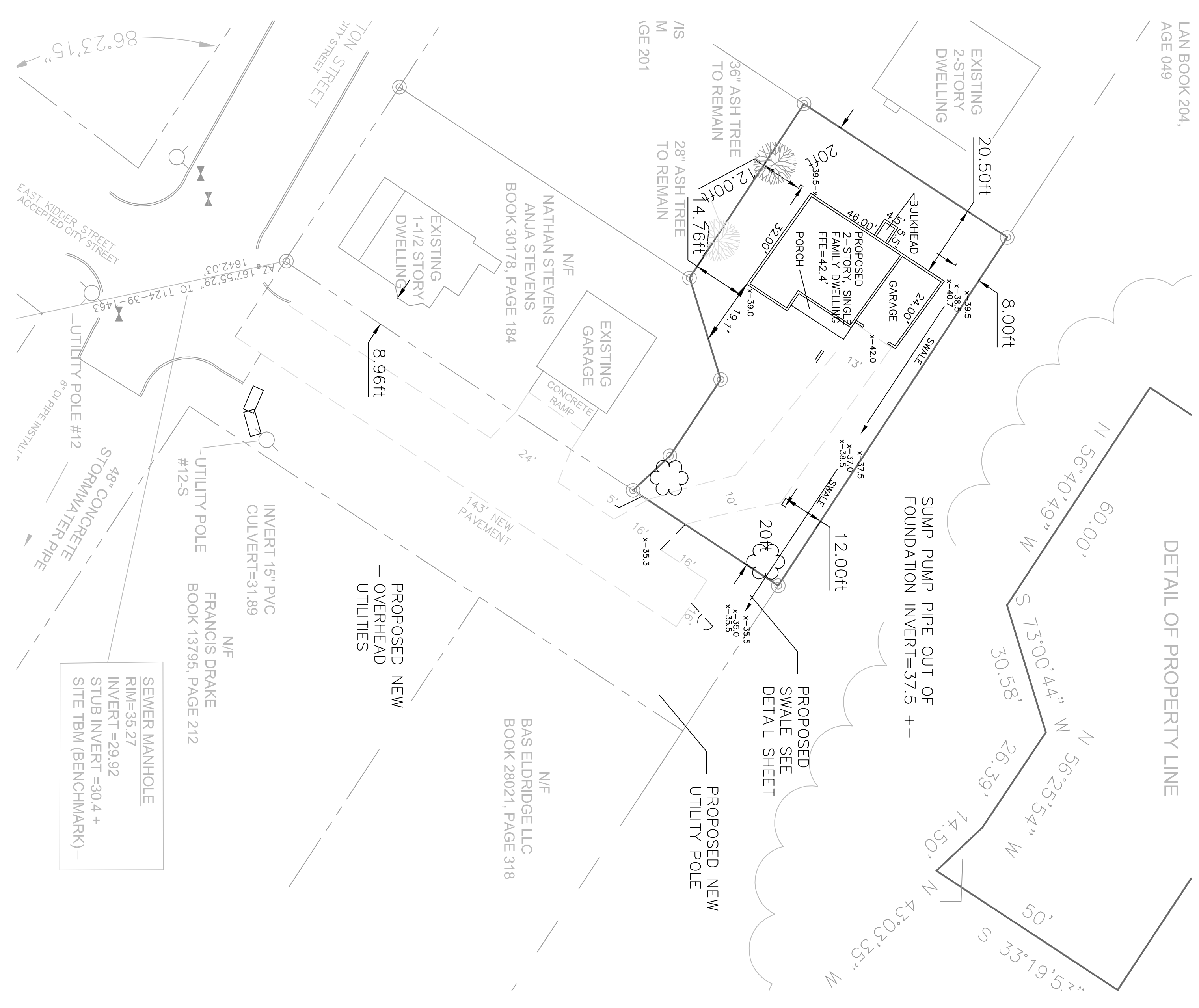
HAY BALE SEDIMENT BARRIER  
NOT TO SCALE



STONE CHECK DAM  
NOT TO SCALE



SWALE PROFILE  
NOT TO SCALE



REVISIONS:  
 REVISED 03-20-2013: CHANGED DIMENSION OF PROPOSED HOUSE  
 REVISED 03-12-2013: ADDED STONE CHECK DAM TO FOUNDATION.  
 EROSION CONTROL PLAN 0 EAST KIDDER STREET  
 PORTLAND MAINE SHEET 3 OF 3.  
 DATED 02-21-2013