

- LEGEND**
- EX. TREES
 - EXIST. MAJOR CONTOUR
 - EXIST. MINOR CONTOUR
 - EXIST. PROPERTY LINE
 - WUS WETLANDS
 - IMBRICATED RIPRAP
 - B-1 BORING LOCATION
 - 12" REINFORCED GRADED AGGREGATE BASE (GAB)

- TREE DISPOSITION LEGEND**
- SAVE
 - REMOVE
 - TRY TO SAVE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD

CONTRACTOR SHALL REPLACE ANY CURB & GUTTER OR SIDEWALK DAMAGED DURING CONSTRUCTION TO PRE-CONSTRUCTION CONDITION.

CONTRACTOR SHALL ADJUST THE OUTLET OF TWO FLEXIBLE ROOF DRAIN PIPES FROM LOT 153 AND 154 TO MATCH WITH PROPOSED GRADING. THE OUTLET CAN BE PLACED ANYWHERE OF THE STREAM BANK SLOPE ON TOP OF IMBRICATED WALL.

AS-BUILT
OCTOBER, 2006

- TIME RESTRICTION NOTES:**
- PUMPING IS NOT PERMITTED BETWEEN THE HOURS OF 7 PM AND 7 AM, MONDAY THROUGH FRIDAY.
 - CONSTRUCTION EQUIPMENT SHALL NOT BE STARTED NOR RUN BETWEEN THE HOURS OF 7 PM AND 7 AM, MONDAY THROUGH FRIDAY.
 - FOR SATURDAY WORK, THE ABOVE HOURS SHALL BE FROM 5 PM AND 9 AM RESPECTIVELY.
 - NO WORK SHALL BE DONE ON SUNDAY.

NO.	REVISIONS DESCRIPTION	DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI
TECHNOLOGIES www.kci.com

ASPENWOOD, SECTION 2,
AREA 1, LOT 175
SLOPE STABILIZATION

HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS
COLUMBIA, MARYLAND 21046-6777
(410)-313-4640

PLAN SHEET

SCALE: 1" = 10'

DATE: 1-11-06

KCI JOB NO.: 01043223.01

CAPITAL PROJECT NO.:

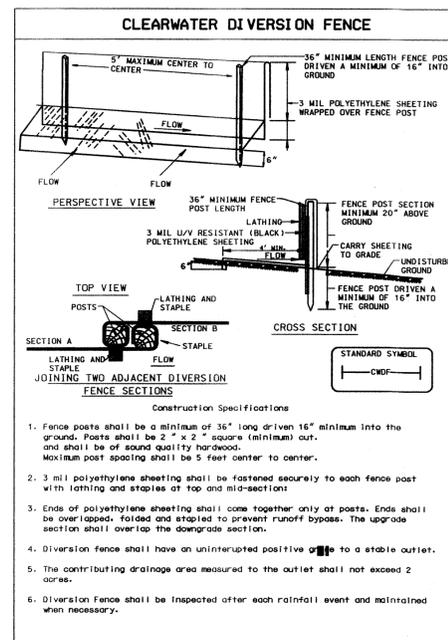
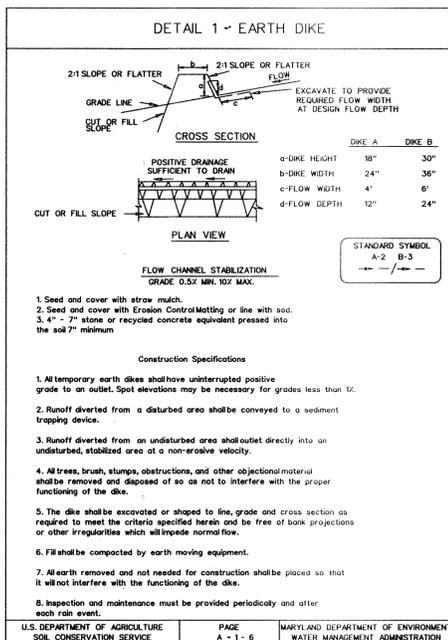
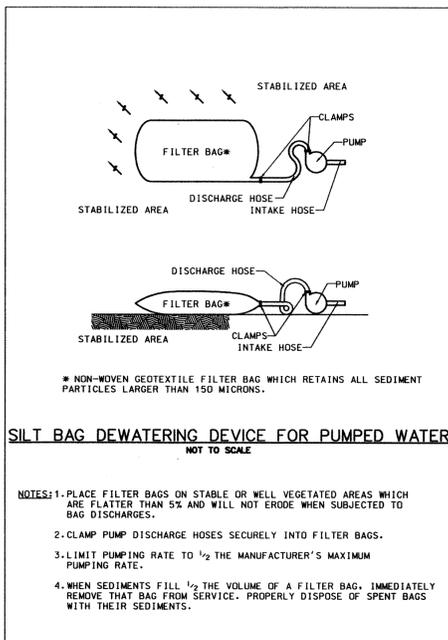
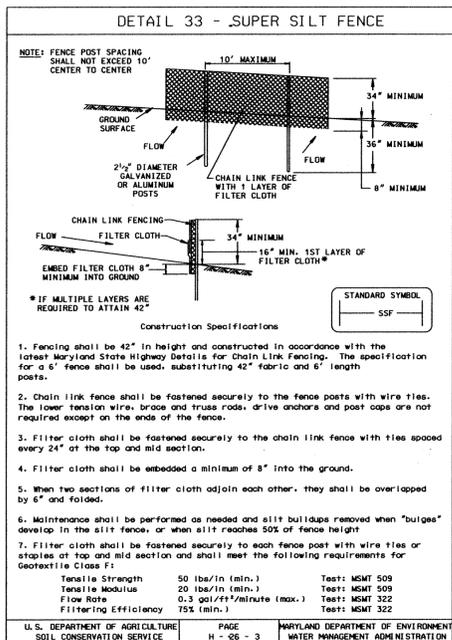
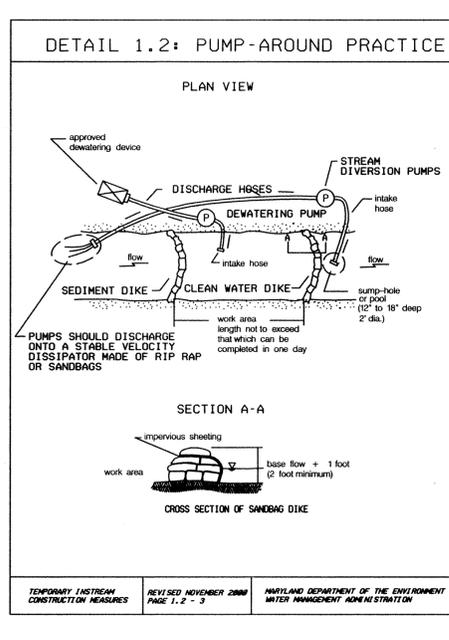
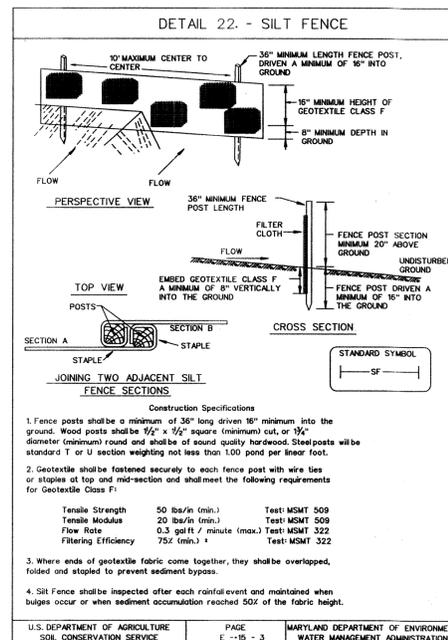
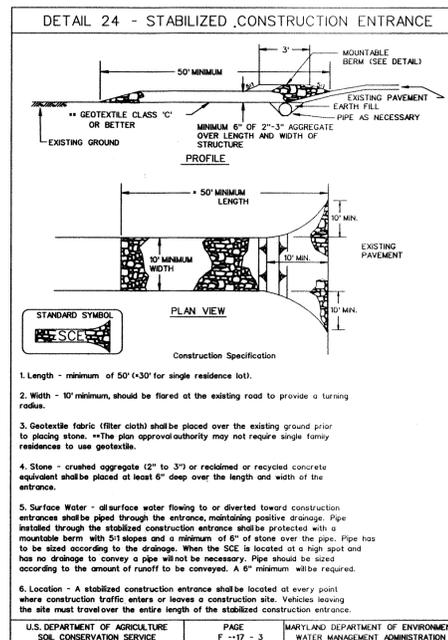
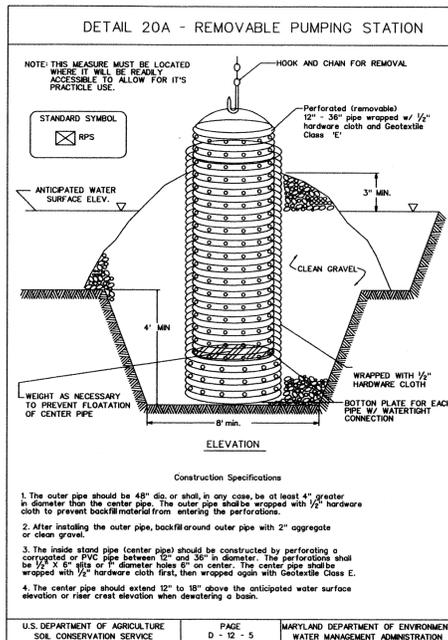
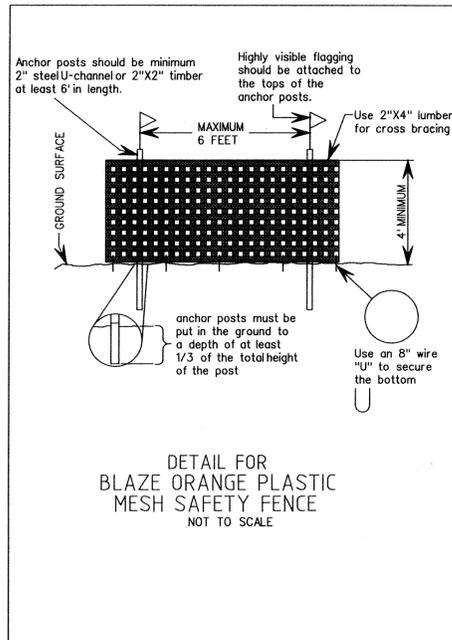
PERMIT ISSUE:

CONSTRUCTION ISSUE:

3

SHEET NO. : OF 11

KCI FILE: M:\2004\01043223.01\Drawings\ps01will.dgn



REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

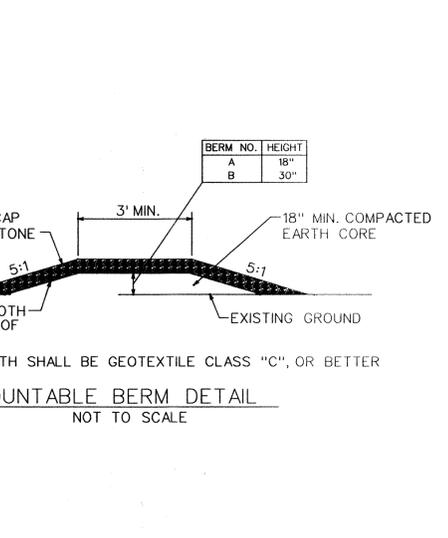
Jim Meyer
USDA NATURAL RESOURCES CONSERVATION SERVICE

John R. Robertson
HOWARD SCD

1/31/06
DATE

1/31/06
DATE

NOTE: ALL WATER COLLECTED WITHIN THE LIMIT OF DISTURBANCE (WITH THE EXCEPTION OF WATER DIVERTED AROUND THE WORK AREA) SHALL BE PUMPED THROUGH THE FILTER BAG.



NOTE: 1.2: PUMP-AROUND PRACTICE

Temporary measures for dewatering in-channel construction sites.

DESCRIPTION

The work should consist of installing a temporary pump around and supporting measures to divert flow around in-stream construction sites.

IMPLEMENTATION SEQUENCE

Sediment control measures, pump-around practices, and associated channel and bank construction should be completed in the following sequence (refer to Detail 1.2):

- Construction activities including the installation of erosion and sediment control measures should not begin until necessary easements and/or right-of-way have been acquired. All existing utilities should be marked by field prior to construction. The contractor is responsible for any damage to existing utilities that may result from construction and should repair the damage at his/her own expense to the county's utility company's satisfaction.
- The contractor should notify the Maryland Department of the Environment or WMA sediment control inspector, the county project manager, and the engineer to review levels of disturbance, erosion and sediment control requirements, and the sequence of construction. The contractor should stick out all levels of disturbance prior to the pre-construction meeting so they may be reviewed. The participants will also designate the contractor's staging areas and flag all trees within the limit of disturbance, which will be removed for construction access. Trees should not be removed within the limit of disturbance without approval from the WMA or local authority.
- Construction should not begin until all sediment and erosion control measures have been installed and approved by the engineer and the sediment control inspector. The contractor should stay within the limits of the disturbance as shown on the plans and minimize disturbance within the work area whenever possible.
- Upon installation of sediment control measures and approved by the sediment control inspector, the contractor should begin work at the upstream section and proceed downstream. The contractor should not begin work at the downstream section until the upstream section is completed. The contractor should only begin work in an area which can be completed by the end of the day including grading adjacent to the channel. At the end of each work day, the work area must be stabilized and the pump around removed from the channel. Work should not be conducted in the channel during rain events.
- Sandbag dikes should be situated at the upstream and downstream ends of the work area as shown on the plans and stream flow should be pumped around the work area. The pump should discharge into a stable velocity dissipator made of rip rap or sandbags.
- Water from the work area should be pumped to a sediment filtering measure such as a dewatering bank, sediment bag, or other approved device. The measure should be located such that the water drains back into the channel below the dike.
- Traversing a channel reach with equipment within the work area where no work is proposed should be avoided. If equipment has to traverse such a reach, access to another area, then rip rap mats or similar measures should be used to minimize disturbance to the channel.
- Temporary stream restoration measures should be used to restore the channel to the original plans or specified. (See Section 4, Stream Crossings, Maryland Guidelines to Waterway Construction).
- All stream restoration measures should be installed as indicated by the plans and all banks graded in accordance with the grading plans and typical cross-sections. All grading must be stabilized at the end of each day with seed and mulch or seed and matting as specified on the plans.
- After an area is completed and stabilized, the clean water dike should be removed. After the first sediment flush, a new clean water dike should be established upstream from the old sediment dike. Finally, upon establishment of a new sediment dike below the old one, the old sediment dike should be removed.
- A pump around must be installed on any tributary or storm drain outlet, which contributes flow to the work area. This should be accomplished by locating a sandbag dike at the downstream end of the tributary or storm drain outlet and pumping the stream flow around the work area. This water should discharge onto the same velocity dissipator used for the main stem work area.
- If a tributary is to be restored, construction should take place on the tributary before work on the main stem reaches the tributary confluence. Construction in the tributary, including pump around practices, should follow the same sequence as for the main stem of five or stream. When construction on the tributary is completed, work on the main stem should resume. Water from the tributary should continue to be pumped around the work area in the main stem.
- The contractor is responsible for providing access to and maintaining all erosion and sediment control devices until the sediment control inspector approves their removal.
- After construction, all disturbed areas should be regraded and revegetated as per the planting plan.

