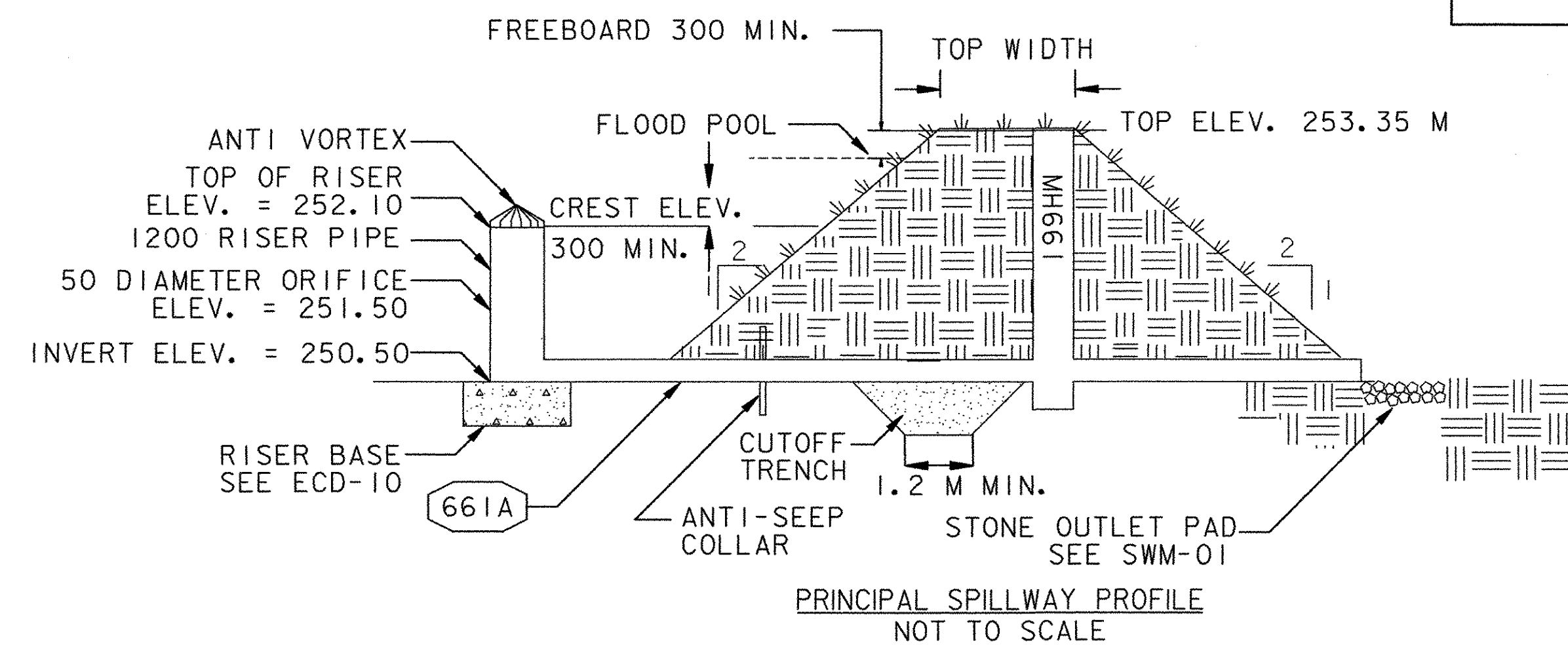
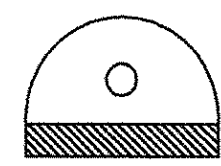
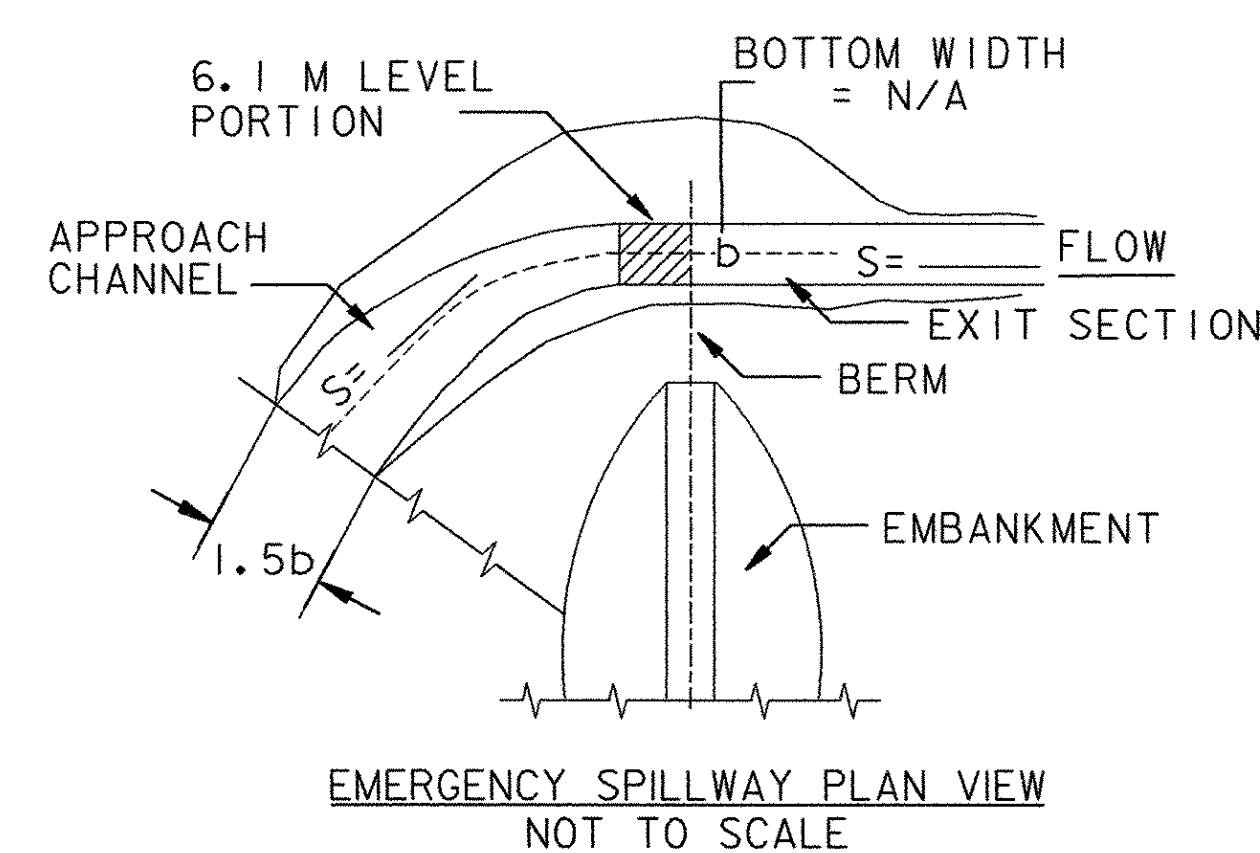


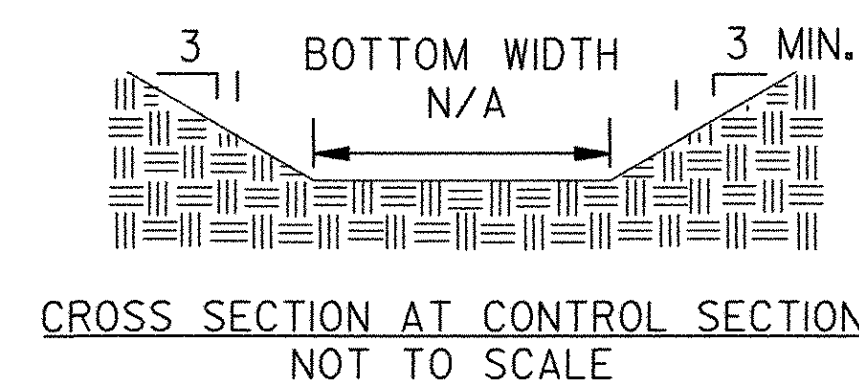
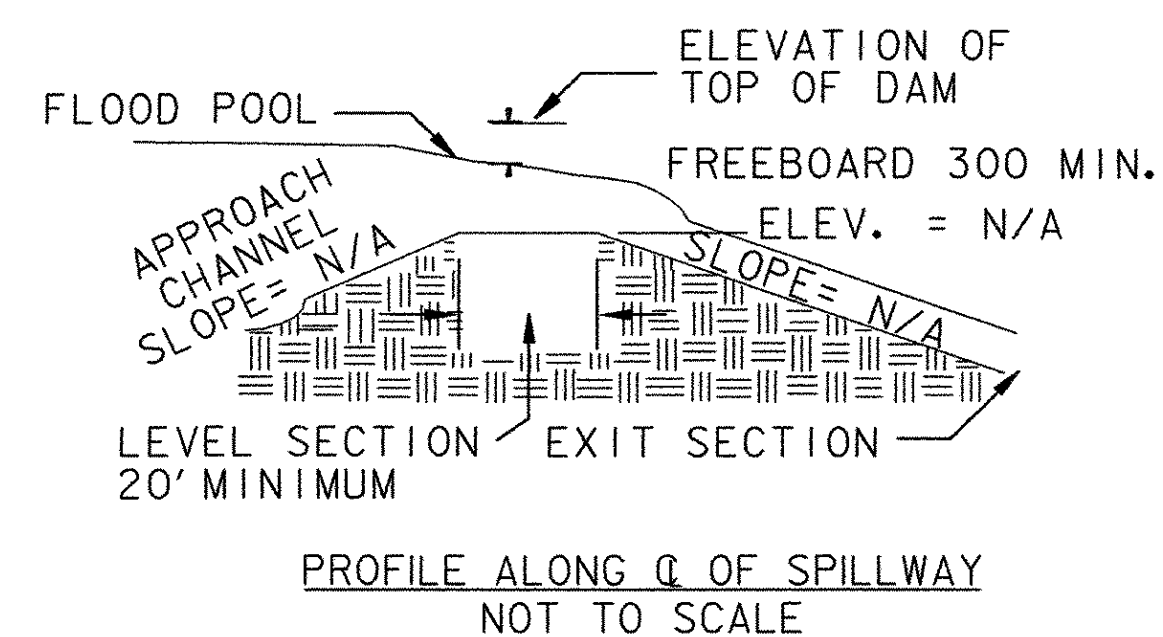
SYMBOL



MAXIMUM DRAINAGE AREA = 100 ACRES



SEDIMENT BASIN DETAILS

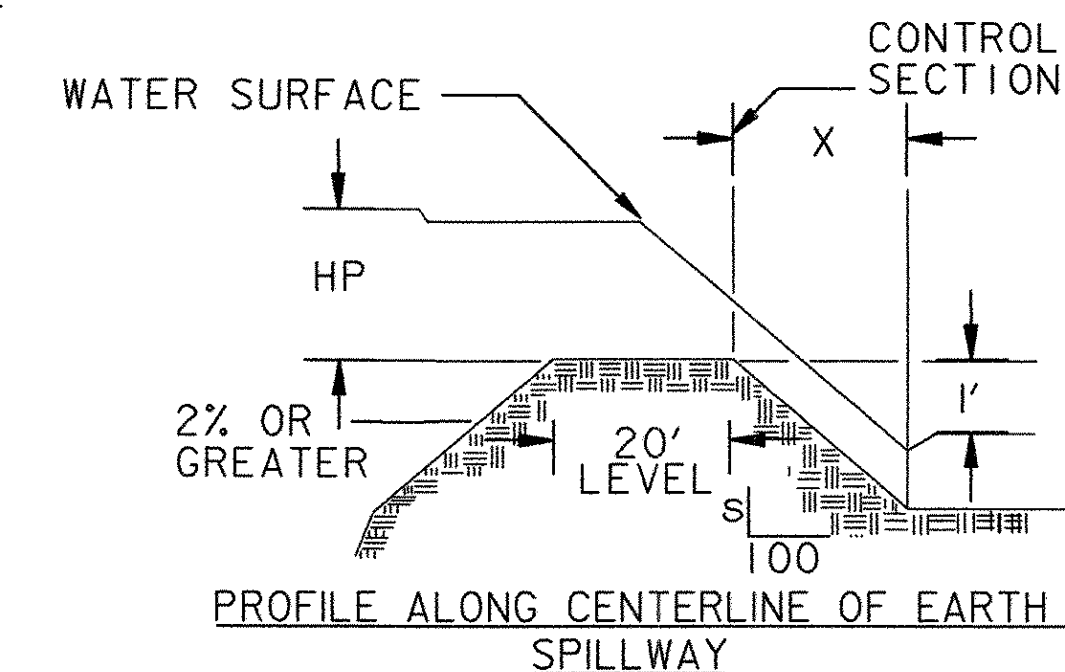
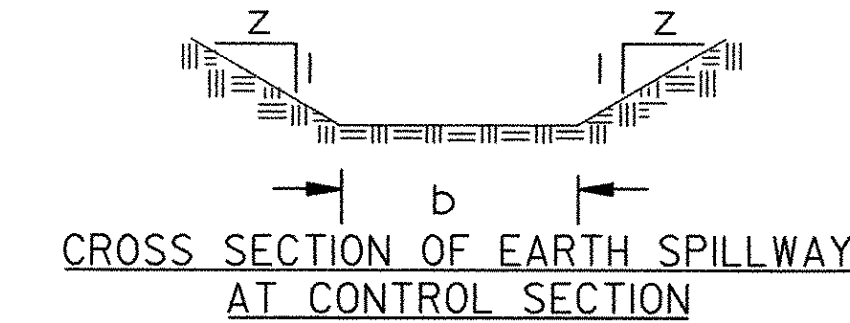
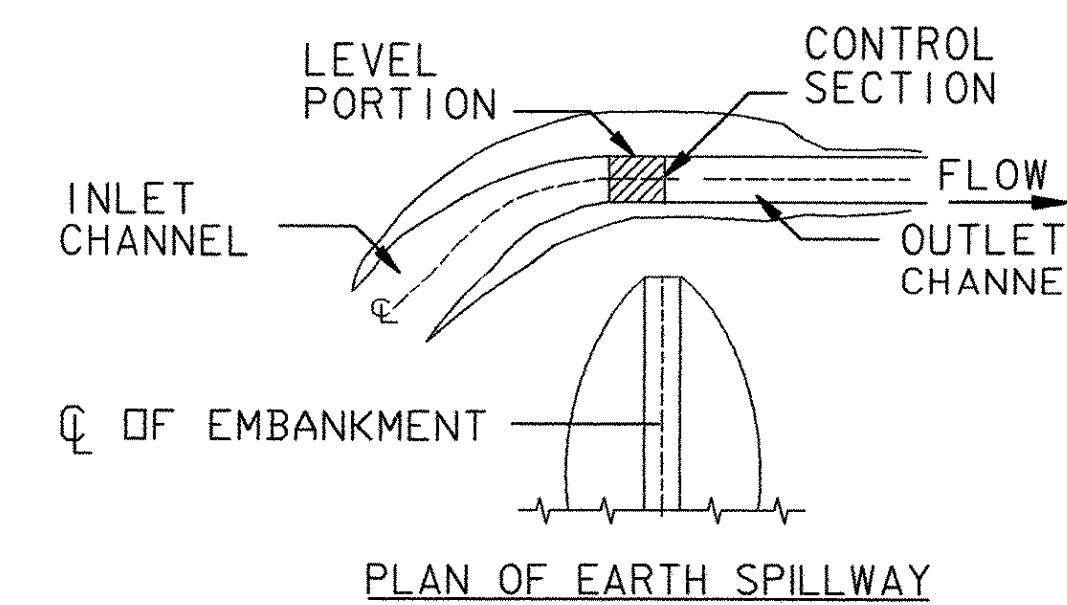


CONSTRUCTION SPECIFICATION

- TEMPORARY SEDIMENT BASIN INCLUDING EXCAVATION, SPILLWAYS, DEWATERING DEVICES, RISER BASES, ANTI-SEEP COLLARS AND ANY OTHER INCIDENTAL REQUIRED TO CONSTRUCT A COMPLETE AND OPERATIONAL SEDIMENT BASIN SHALL BE PAID FOR UNDER ITEM 900.620 SPECIAL PROVISION (TEMPORARY SEDIMENT BASIN).

NOTES:

- REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
- ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
- ENGLISH UNITS RETAINED FROM ORIGINAL DESIGN DATA FOR EARTH SPILLWAYS DETAIL



LEGEND

- n = MANNING'S COEFFICIENT OF ROUGHNESS.
- HP = DIFFERENCE IN ELEVATION BETWEEN CREST OF EARTH SPILLWAY AT THE CONTROL SECTION AND WATER SURFACE IN RESERVOIR, IN FEET.
- b = BOTTOM WIDTH OF EARTH SPILLWAY AT THE CONTROL SECTION, IN FEET.
- Q = TOTAL DISCHARGE, IN cfs.
- V = VELOCITY, IN FEET PER SECOND, THAT WILL EXIST IN CHANNEL BELOW CONTROL SECTION, AT DESIGN Q, IF CONSTRUCTED TO SLOPE (S) THAT IS SHOWN.
- S = FLATTEST SLOPE (S), IN %, ALLOWABLE FOR CHANNEL BELOW CONTROL SECTION.
- X = MINIMUM LENGTH OF CHANNEL BELOW CONTROL SECTION, IN FEET.
- z = SIDE SLOPE RATIO.

NOTES:

- FOR A GIVEN HP A DECREASE IN THE EXIT SLOPE FROM S AS GIVEN IN THE TABLE DECREASES SPILLWAY DISCHARGE BUT INCREASING THE EXIT SLOPE FROM S DOES NOT INCREASE DISCHARGE. IF AN EXIT SLOPE (Se) STEEPER THAN S IS USED, THEN VELOCITY (Ve) IN THE EXIT CHANNEL WILL INCREASE ACCORDING TO THE FOLLOWING RELATIONSHIP:

$$V_e = V \cdot 0.3 \left( \frac{S_e}{S} \right)$$

- PAYMENT FOR EARTH SPILLWAY SHALL BE INCIDENTAL TO ITEM 900.620 SPECIAL PROVISION (TEMPORARY SEDIMENT BASIN).

DESIGN DATA FOR EARTH SPILLWAYS

VERMONT AGENCY OF TRANSPORTATION

PROJECT NAME: BENNINGTON  
PROJECT NUMBER: AC NH 019-1(51)

FILE NAME: ...\\plot files\zd307cldet\_epsc.prf PLOT DATE: 1/30/2009  
DESIGN SUPERVISOR: VTRANS DRAWN BY: VTRANS  
DESIGNED BY: VTRANS CHECKED BY: VTRANS  
EP & SC DETAILS ECD-08 SHEET 105 OF 367