NOTES:

- 1. THE OIL/WATER SEPARATOR SHALL MEET THE UNDERWRITERS LABORATORY UL-58 STANDARD FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS.
- 2. THE OIL/WATER SEPARATOR SHALL BE CAPABLE OF ACHIEVING A DISCHARGE QUALITY OF 30 PARTS PER MILLION OF PETROLEUM HYDROCARBONS OR LESS.

USE OF AN OILWATER SEPARATOR DURING DEWATERING

CD-158-4.1

FINAL STAGE EMBANKMENT

STAGE 2 EMBANKMENT

STAGE 1 EMBANKMENT

SIDE DITCH

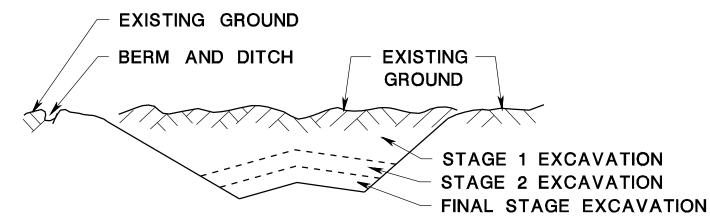
TEMPORARY BERM TO BE PLACED AT THE END OF EACH WORK DAY TO BE USED UNTIL SLOPE IS COMPLETELY STABILIZED.

EXISTING
GROUND

PHASING PLAN-FILL SECTION

CONSTRUCTION SEQUENCE:

- 1. EXCAVATE AND STABILIZE SIDE DITCHES AND/OR INSTALL PROPOSED CONTROLS AT THE TOE OF SLOPE.
- 2. PLACE STAGE 1 EMBANKMENT. PLACE TEMPORARY SEEDING AND MULCH, OR TOPSOIL AND PERMANENTLY SEED AND MULCH SLOPE AT THIS STAGE.
- 3. PLACE STAGE 2 EMBANKMENT. PLACE TEMPORARY SEEDING AND MULCH OR TOPSOIL AND PERMANENTLY SEED AND MULCH SLOPE AT THIS STAGE.
- 4. PLACE FINAL STAGE EMBANKMENT. PLACE TOPSOIL, PERMANENT SEED AND MULCH ON THE SLOPE AT THIS STAGE AND ON THE ENTIRE SLOPE IF NOT PREVIOUSLY DONE.



PHASING PLAN-CUT SECTION

CONSTRUCTION SEQUENCE:

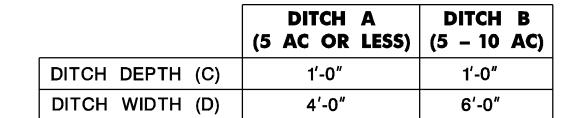
- 1. EXCAVATE AND STABILIZE BERM, SIDE AND OUTLET DITCHES.
- 2. PERFORM STAGE 1 EXCAVATION. TOPSOIL, PERMANENTLY SEED, AND MULCH SLOPE AT THIS STAGE.
- 3. PERFORM STAGE 2 EXCAVATION. TOPSOIL, PERMANENTLY SEED, AND MULCH SLOPE AT THIS STAGE.
- 4. PERFORM FINAL STAGE EXCAVATION. TOPSOIL, PERMANENTLY SEED, AND MULCH SLOPE AT THIS STAGE.
 REPAIR ANY DAMAGE DONE TO PREVIOUS STAGES.

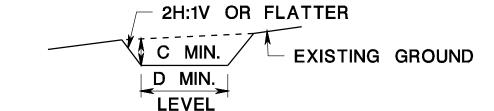
EMBANKMENT

BEFORE BEGINNING ANY EARTHWORK, EXCAVATE AND STABILIZE SIDE DITCHES AND INSTALL PERIMETER CONTROLS (SILT FENCE, ETC.). SLOPES GREATER THAN 25 FEET IN HEIGHT SHALL BE EXCAVATED AND STABILIZED IN STAGES OF EQUAL INCREMENTS NOT TO EXCEED 15 FEET.

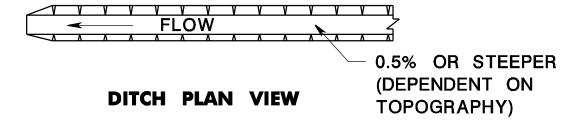
AT THE END OF EACH WORK DAY TEMPORARY BERMS (EARTH) AND SLOPE DRAINS SHALL BE CONSTRUCTED ALONG THE TOP EDGE(S) OF THE EMBANKMENT TO INTERCEPT SURFACE RUNOFF.

ROADWAY GRADING
CD-158-4.2





DITCH CROSS SECTION



TOPOGRAPH	Y)	BERM A (5 AC OR LESS)	BERM B (5 – 10 AC)
B OR FLATTER	BERM HEIGHT (A)	18"	36"
R FLATTER -	BERM WIDTH (B)	24"	36"
A FLOW	FLOW WIDTH (C)	48"	72"
GRADE LINE	FLOW HEIGHT (D)	8"	15"
IT OR			

STABILIZATION AS REQUIRED. ON
STEEP SLOPES EXCAVATE TO PROVIDE
REQUIRED FLOW WIDTH AT FLOW DEPTH.
BERM CROSS SECTION

NOTE:

FILL SLOPE

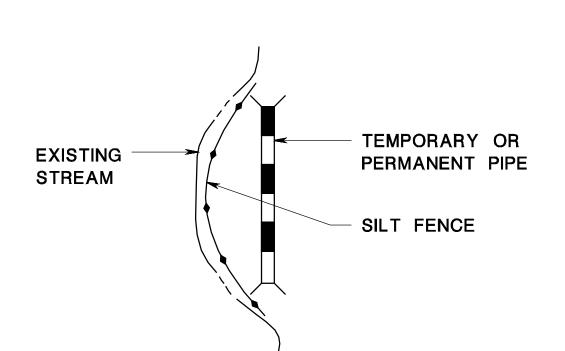
FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED OUTLET.

STABILIZATION FOR DITCH OR BERM

TYPE OF TREATMENT	GRADE	A - (5 AC OR LESS)	B - (5 - 10 AC)
1	0.5 - 5.0%	SEED USED WITH TOPSOIL STABILIZATION MATTING	SEED USED WITH TOPSOIL STABILIZATION MATTING
2	5.1 - 8.0%	SEED USED WITH TOPSOIL STABILIZATION MATTING	LINED 6"- 9" RIPRAP
3	8.1 - 20.0%	LINED 6"-9" RIPRAP	ENGINEERED DESIGN

TEMPORARY RUNOFF DIVERSION

CD-158-4.3



METHOD A

CONSTRUCTION SEQUENCE:

- 1. INSTALL SILT FENCE ALONG EXISTING STREAM IN AREA OF PROPOSED PIPE CONSTRUCTION.
- 2. CONSTRUCT PIPE SYSTEM.
- 3. DIVERT STREAM FLOW INTO PIPE.
- 4. FOR TEMPORARY DIVERSIONS, RETURN FLOW TO EXISTING STREAM.
- 5. RESTORE TEMPORARY DIVERSION AREA TO ORIGINAL CONDITION.

TEMPORARY OR PERMANENT PIPE TEMPORARY OR PERMANENT PIPE SILT FENCE DIVERSION CHANNEL

METHOD B

CONSTRUCTION SEQUENCE:

STREAM DIVERSION

- 1. INSTALL SILT FENCE ALONG EXISTING STREAM IN AREA OF TEMPORARY DIVERSION CHANNEL.
- 2. CONSTRUCT TEMPORARY DIVERSION CHANNEL AND LINE WITH GEOTEXTILE AND TEMPORARY RIPRAP.
- 3. DIVERT STREAM FLOW INTO TEMPORARY CHANNEL.
- 4. CONTINUE SEQUENCE FROM STEP 2, METHOD A.

SOIL EROSION AND SEDIMENT CONTROL MEASURES

N.T.S.

CD-158-4

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

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