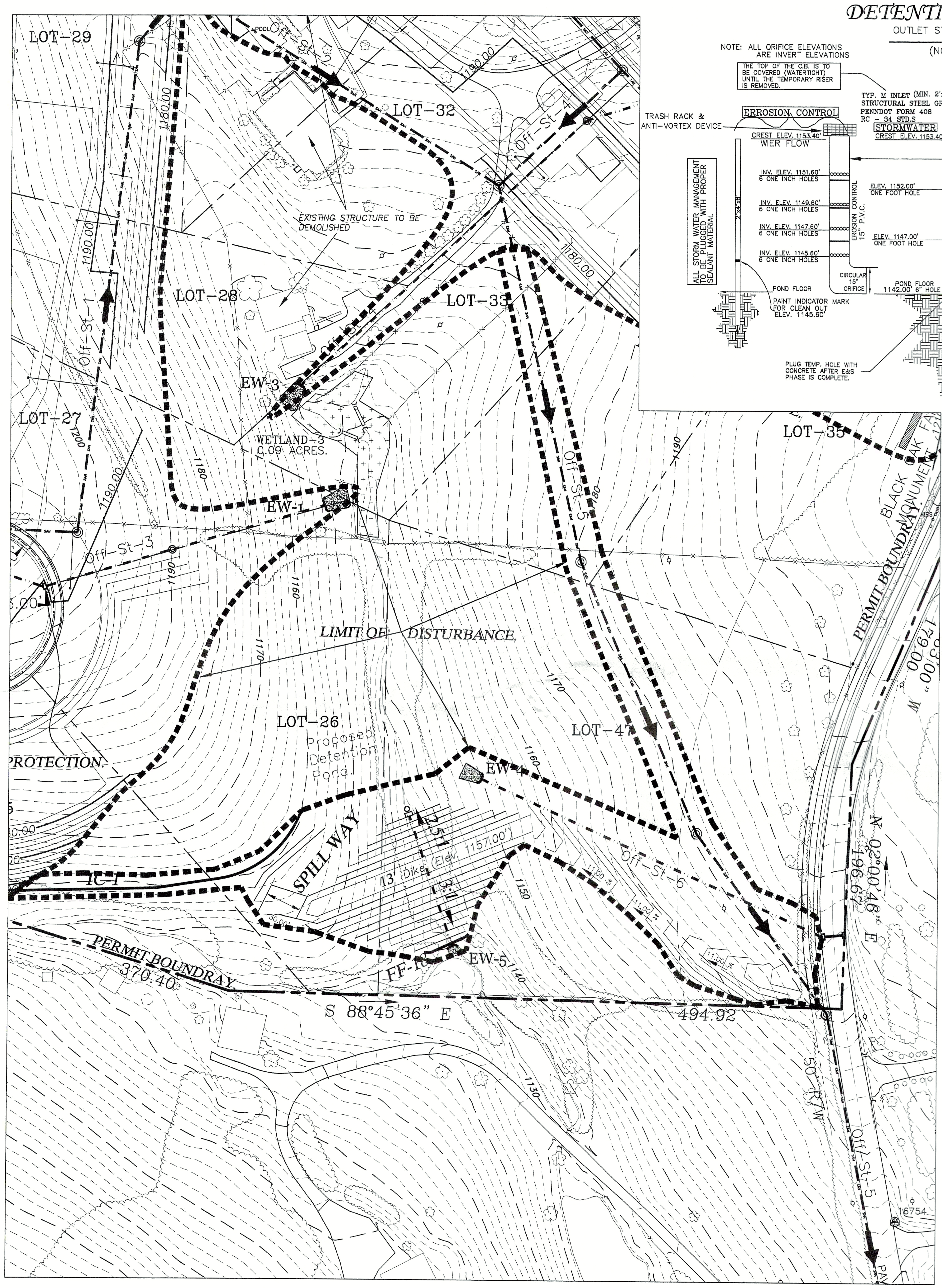


GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

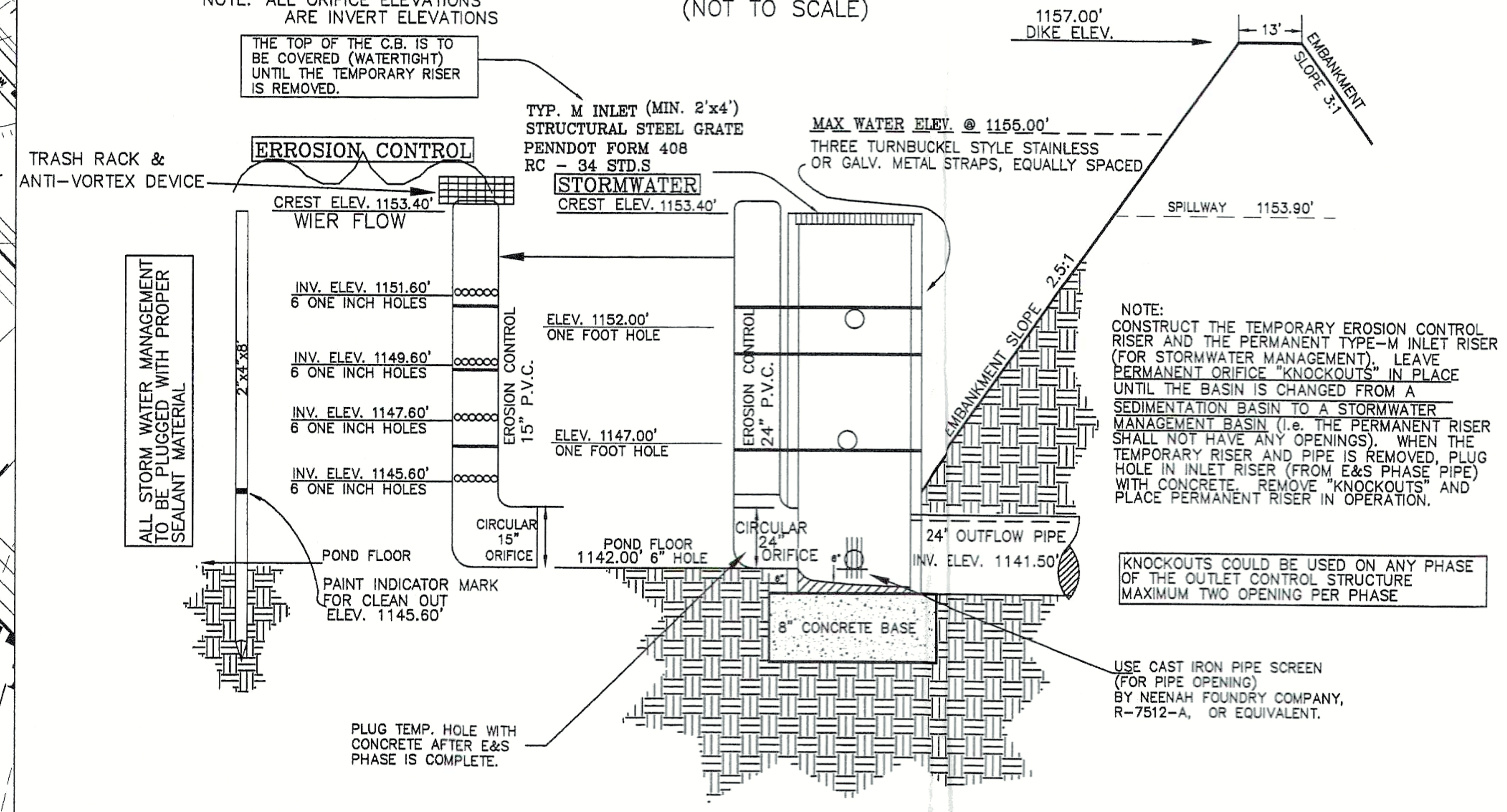
All sediment removed from the control facilities shall be placed in the stockpile.
All the maintenance of the Erosion and sedimentation controls shall be the Contractors responsibility
any require maintenance must be completed immediately after the inspection shows the need for it.

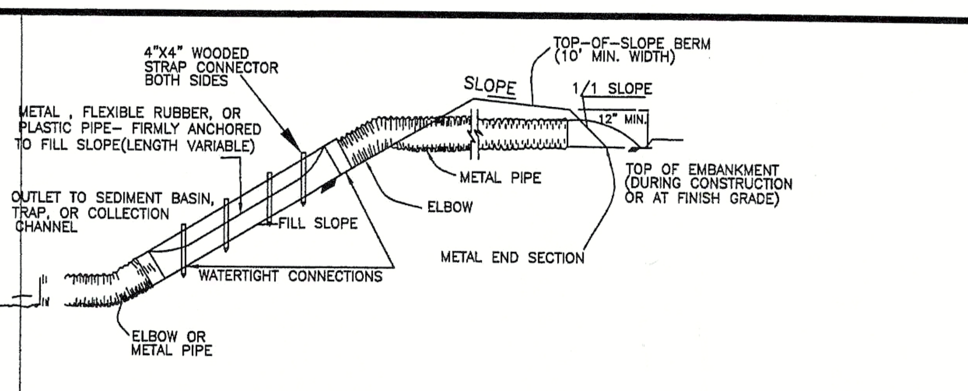
DETENTION BASIN SP-1

DETENTION BASIN SP

OUTLET STRUCTURE DETAIL

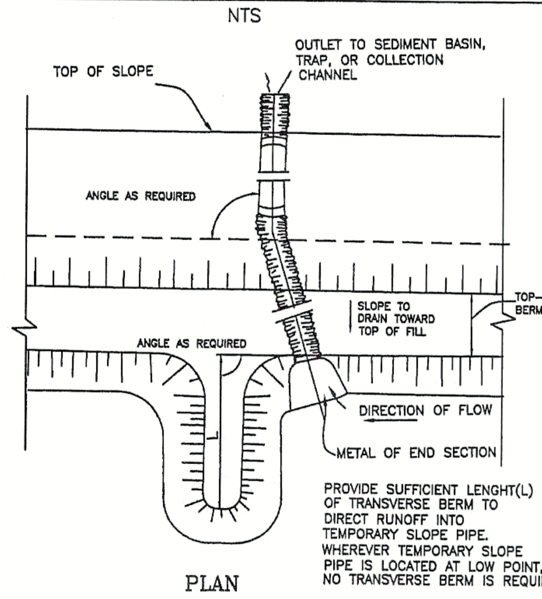
(NOT TO SCALE)





SLOPE PIPE WITH TRANSVERSE BERM

NTS



PLAN

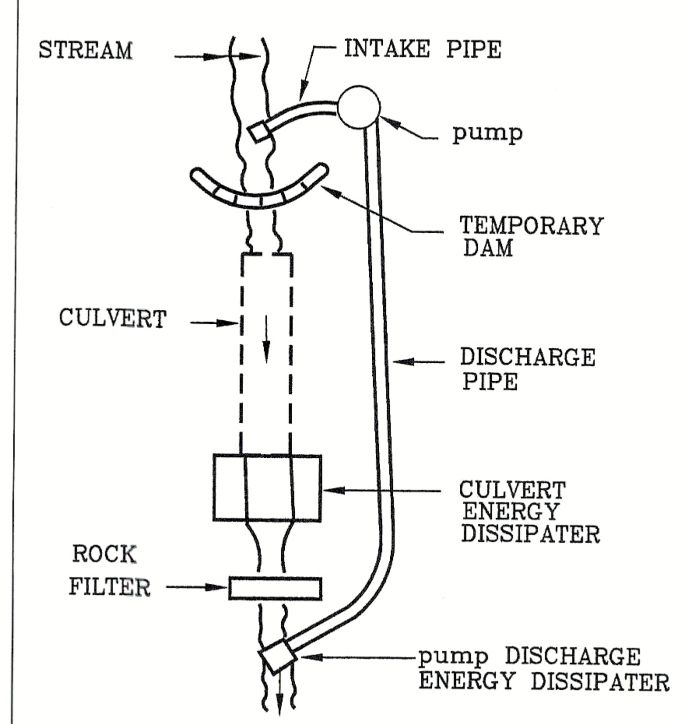
NTS

* ERM MUST BE USED WHENEVER TEMPORARY SLOPE PIPE IS NOT LOCATED AT LOW POINT.

ANY ACCUMULATED SEDIMENT SHOULD BE REMOVED FROM THE INLET.

STANDARD CONSTRUCTION DETAIL # 27
TEMPORARY SLOPE PIPE

A TEMPORARY COFFERDAM ACROSS THE STREAM WITH A PUMP AND PIPING TO PUMP FLOWS AROUND WORK AREAS



SEDIMENTATION BASIN

STANDARDS AND SPECIFICATIONS

DESIGN:

1. DESIGN STANDARDS FOR SEDIMENTATION BASINS ARE CONTAINED IN CHAPTER 102 RULES AND REQULATIONS, SECTION 102.13(F). THEY ARE CONTAINED IN CHAPTER 2 OF THE MANUAL, BEGINNING ON PAGE 2.42. DESIGN METHODS ARE FOUND IN CHAPTER 4.K OF THE MANUAL.

CONSTRUCTION:

1. SEDIMENTATION BASINS, INCLUDING ALL APPURTENANT WORKS, WILL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE PLAN.
2. ONLY SUITABLE MATERIALS (SOILS) WILL BE USED TO CONSTRUCT BASIN EMBANKMENTS. UNSUITABLE MATERIALS DERIVED FROM EXCAVATION OF THE BASIN, WILL BE HAULED TO ANY AREA SHOWN ON PLAN VIEW IF THEY CANNOT BE OTHERWISE UTILIZED ON THE PROJECT.

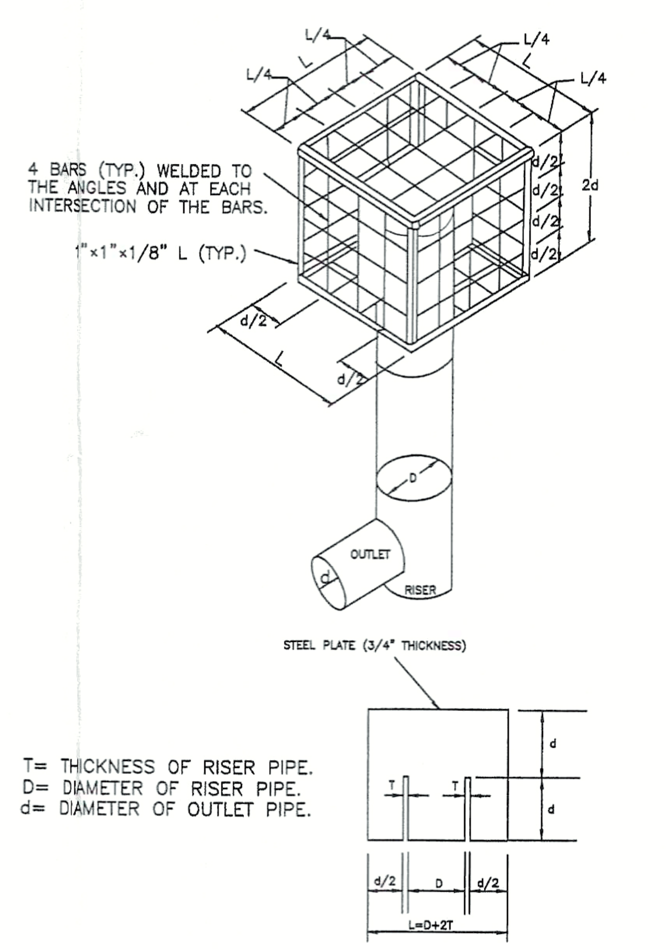
MAINTENANCE:

1. SEDIMENT WILL BE REMOVED FROM THE SEDIMENTATION BASIN WHEN THE CAPACITY OF THE BASIN IS REDUCED BY 2000 CUBIC FEET PER ACRE OF PROJECT AREA TRIBUTARY TO IT.
2. THE "CLEAN-CUT"" ELEVATION WILL BE CLEARLY INDICATED ON THE 2"x4" WITH A PAINT INDICATOR MARK, (SEE STRUCTURE DETAILS FOR ELEVATION)
3. SEDIMENT WILL NOT BE ALLOWED TO ENTER WATERS OF THE COMMONWEALTH DURING EITHER SEDIMENT REMOVAL OR DISPOSAL OPERATIONS. (THE LOCATION OF SEDIMENT DISPOSAL AREA IS SHOWN ON THE PLAN VIEW.
4. SEDIMENTATION BASINS WILL BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.

NOTE:

* FOR MORE INFORMATION SEE SECTION 859-"SEDIMENTATION POND" OF THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, 1990- PUB. 408.

ALL EARTHMOVING ACTIVITIES SHALL BE CONDUCTED & CONFORM TO SPECIFICATIONS AND REQUIREMENTS OF THE "EROSION AND SEDIMENT POLLUTION CONTROL MANUAL", APRIL 1990, DEPARTMENT OF ENVIRONMENTAL RESOURCES, BUREAU OF SOIL AND WATER CONSERVATION.



ANTI- VORTEX DEVICE

TRASH RACK AND ANTI-VORTEX DEVICE

NTS

THE PRINCIPAL SPILLWAY RISER MUST BE SECURELY ANCHORED AND ATTACHED TO THE BARREL WITH A WATERTIGHT SEAL.

102.5(b)(8)

MAINTENANCE PROGRAM

MAINTENANCE SCHEDUL

CONTROL MEASURE	INSPECT	PROBLEMS TO LOOK FOR	POSSIBLE REMEDIES
VEGETATION	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT AT TOE OF SLOPE	CHECK FOR TOP-OF-SLOPE DIVERSION AND INSTALL IF NEEDED.
		RILLS AND GULLIES FORMING	FILL RILLS AND REGRADE GULLIED SLOPES.
		BARE SOIL PATCHES	RESEED, FERTILIZE, AND MULCH BARE AREAS.
SWALES	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	GULLY ON SLOPE BELOW SWALE	REPAIR BREACHES
		WHEEL TRACK, LOW POINT (WATER POUNDED IN SWALE)	BUILD UP LOW POINTS WITH COMPACTED SOIL OR SANDBAGS OR REBUILD SWALES WITH POSITIVE DRAINAGE
		SEDIMENT OR DEBRIS IN CHANNEL	REMOVE OBSTRUCTION
		EROSION OF UNLINED CHANNEL SURFACE	SEED AND MULCH SWALE AND ANCHOR WITH NETTING; OR LINE SWALE WITH CRUSHED ROCK; OR INSTALL CHECK DAMS; OR REALIGN SWALE ON GENTLER GRADIENT; OR DIVERT SOME OR ALL OF SWALE'S DRAINAGE TO A MORE STABLE FACILITY.
		EROSION OF CHANNEL LINING	RESEED, MULCH, AND ANCHOR WITH NETTING; OR INSTALL CHECK DAMS.
ROCK CONSTRUC-TION ENTRANCES	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SINK HOLES OR RUTS	ADD ROCK TO BRING TO SPECIFIED DIMENSIONS.
		SEDIMENT ON PUBLIC HIGHWAY	SWEEP MATERIAL BACK TO PROJECT SITE. DO NOT WASH ROADWAY WITH WATER.
FILTER FABRIC FENCE	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	UNDERCUTTING OF FENCE	REPLACE WITH ROCK FILTER OUTLETS
		FENCE COLLAPSING	REPLACE WITH ROCK FILTER OUTLETS
		TORN FABRIC	REPLACE WITH CONTINUOUS PIECE OF FABRIC FROM POST TO POST. SECURELY ANCHOR WITH PROPER STAPLES.
		RUNOFF ESCAPING AROUND BARRIER	EXTEND FENCE.
		SEDIMENT LEVEL NEAR TOP OF FENCE	REMOVE SEDIMENT WHEN LEVEL REACHES HALF OF FENCE HEIGHT.
INLET PROTECTION	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT ACCUMULATION	REMOVE SEDIMENT AND DISPOSE ON SITE.
		RUNOFF ESCAPING AROUND BARRIER	REBUILD BARRIER
SEDIMENT POND	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT ACCUMULATION AT 1' DEPTH	REMOVE SEDIMENT AND DISPOSE ON SITE.
		RUNOFF ESCAPING AROUND BARRIER	REBUILD BARRIER
SEDIMENT TRAPS	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT ACCUMULATION AT 1' DEPTH	REMOVE SEDIMENT AND DISPOSE ON SITE.
		RUNOFF ESCAPING AROUND BARRIER	REBUILD BARRIER
RIPRAP APRONS	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SINK HOLES OR RUTS	ADD ROCK TO BRING TO SPECIFIED DIMENSIONS.
		RIPRAP MOVING FROM ORIGINAL LOCATION	
		RUNOFF ESCAPING AROUND RIPRAP	ADD ROCK AND EXTEND TO AVOID RUNOFF ESCAPING AROUND RIPRAP

SOIL EROSION PLAN & DETAIL

SCALE:	AS SHWON	DRAWN BY:	M.Y.S.
DATE:	5-11-2005	CHECKED BY:	G.F.S.
JOB NO.	03-25	FIELD BOOK NO.	03-25

GEORGE SAAD ENGINEER

BLACK OAK FARMS
PREPARED FOR
RICHLAND PROPERTIES, INC.
SITUATE IN
PINE TOWNSHIP, ALLEGHENY COUNTY, PA.

REVISIONS DATE:

LandTech Engineering Inc.
Surveyors, Planners, and Engineers
Ross Park Professional Bldg. Suite 202
7805 McKnight Road
Pittsburgh, PA 15237
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CADD NO. 05-25