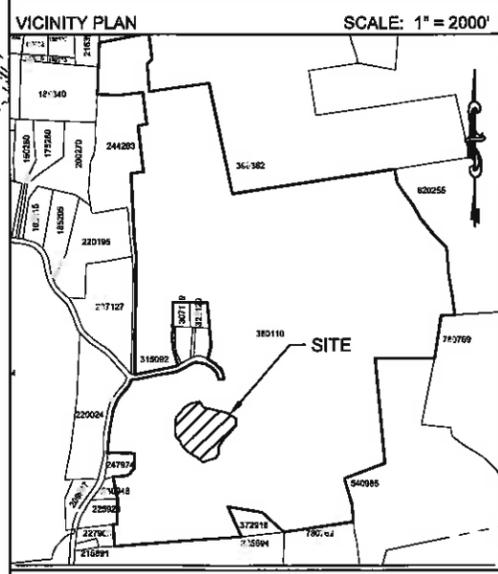
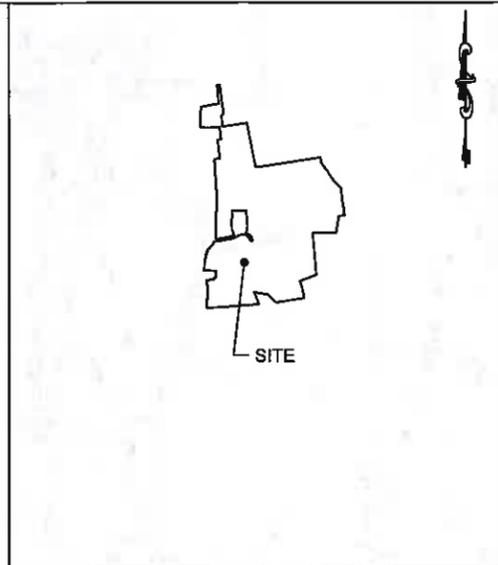


LEGEND

EXISTING CONTOUR-10 FT	---
EXISTING CONTOUR-2 FT	---
PROPOSED CONTOUR-10 FT	---
EXISTING CONTOUR-2 FT	---
DRAINAGE LINE	---
OUTLET STRUCTURE	□
SPOT ELEVATION	867.0 +



CONSTRUCTION NOTES:

- STRIPPING**
1. THE AREA COVERED BY THE BASE OF THE DAM MUST BE STRIPPED OF ALL VEGETATION AND ORGANIC SOIL. THE ORGANIC SOIL SHALL BE STOCKPILED AND USED ON THE DOWNSTREAM SLOPE OF THE EARTH FILL. ALL SLOPES ON SIDES SHALL BE FLATTENED TO MINIMUM OF 5:1. THE CREST AND SIDE SLOPES SHALL BE SEEDED WITH NATIVE GRASSES TO PREVENT SURFACE EROSION.
- KEY TRENCH**
1. A KEY TRENCH (CUTOFF TRENCH) SHALL BE EXCAVATED BELOW THE BASE OF THE FILL UPSTREAM OF THE CENTERLINE OF THE FILL. THE KEY TRENCH SHALL ANCHOR THE EARTH FILL TO THE BASE MATERIAL AND TO PREVENT SEEPAGE UNDER THE FILL.
 2. THE KEY TRENCH SHOULD BE A MINIMUM OF THREE FEET DEEP AND IT SHOULD EXTEND THE FULL LENGTH OF THE EARTH FILL.
- FILL CONSTRUCTION**
1. THE EARTH FILL MUST BE CONSTRUCTED FROM AN IMPEVIOUS (CLAY OR CLAY-BASED) MATERIAL.
 2. ACCEPTABLE FILL MATERIAL SHALL BE PLACED IN HORIZONTAL SIX INCH LIFTS AND COMPACTED WITH SUITABLY SIZED SPEEDY FOOT COMPACTION EQUIPMENT. IF THE MATERIAL IS DRY, MOISTURE SHALL BE ADDED FOR OPTIMAL MOISTURE CONTENT.
 3. NO ROCKS OR STONES GREATER SIX INCHES IN DIAMETER SHALL BE PLACED IN THE EARTH FILL.
 4. THE TOP OF THE CREST SHALL BE BUILT 10% HIGHER THAN THE DESIGN TO ALLOW FOR SETTLEMENT OF THE FILL.
- MAINTENANCE**
1. REGULAR INSPECTION AND MAINTENANCE OF THE EARTH FILL IS REQUIRED.
 2. INSPECT BEFORE SPRING RUNOFF TO ENSURE THE OUTLET STRUCTURE & AUXILIARY SPILLWAY ARE NOT BLOCKED WITH SNOW OR OTHER MATERIAL. ALL BLOCKAGES MUST BE REMOVED TO PREVENT OVERTOPPING AND THE EMBANKMENT WASHING OUT.
 3. ANNUAL SPRING (AFTER SNOW MELT) A VISUAL INSPECTION SHALL BE COMPLETED TO ASSESS THE SLOPES FOR EROSION, ROCKING DAMAGE, SEEPAGE OR SLUMPING. BURROWING RODENTS SUCH AS BEAVERS, MUSKRATS, AND WOODCHUCKS SHOULD BE REMOVED FROM THE DAM IMMEDIATELY. ALL POTENTIAL PROBLEMS MUST BE REPAIRED AS SOON AS POSSIBLE TO SAFEGUARD THE DAM.
 4. SIDE SLOPES MUST BE CLEARED OF TREE GROWTH ON AN ANNUAL BASIS. ALL DISTURBED AREAS WILL BE RE-SEED AS NECESSARY TO PROMOTE SLOPE STABILIZATION.

MAP NOTE:

1. TOPOGRAPHIC SURVEY DATA BASED UPON AN ACTUAL FIELD SURVEY COMPLETED ON OR BEFORE JULY 31, 2012 BY RENNIA ENGINEERING DESIGN.

**REDUCED SIZE PLAN
NOT TO SCALE**

DATE	REVISION

ENGINEERING, DESIGN, & PLANS PREPARED BY:
RENNIA ENGINEERING DESIGN, PLLC
 CIVIL & ENVIRONMENTAL ENGINEERING
 8 Dover Pl., Edge Plaza, Suite 5, P.O. Box 400, Dover Plains, NY 12522
 Tel: (845) 877-0656 Fax: (845) 877-0658
 Copyright 2008. All Rights Reserved.
 IT IS A VIOLATION OF NEW YORK STATE REGULATORY LAW FOR ANY PERSON TO ALTER THESE PLANS, SPECIFICATIONS OR REFERENCES IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.

EXISTING CONDITIONS NOTES:

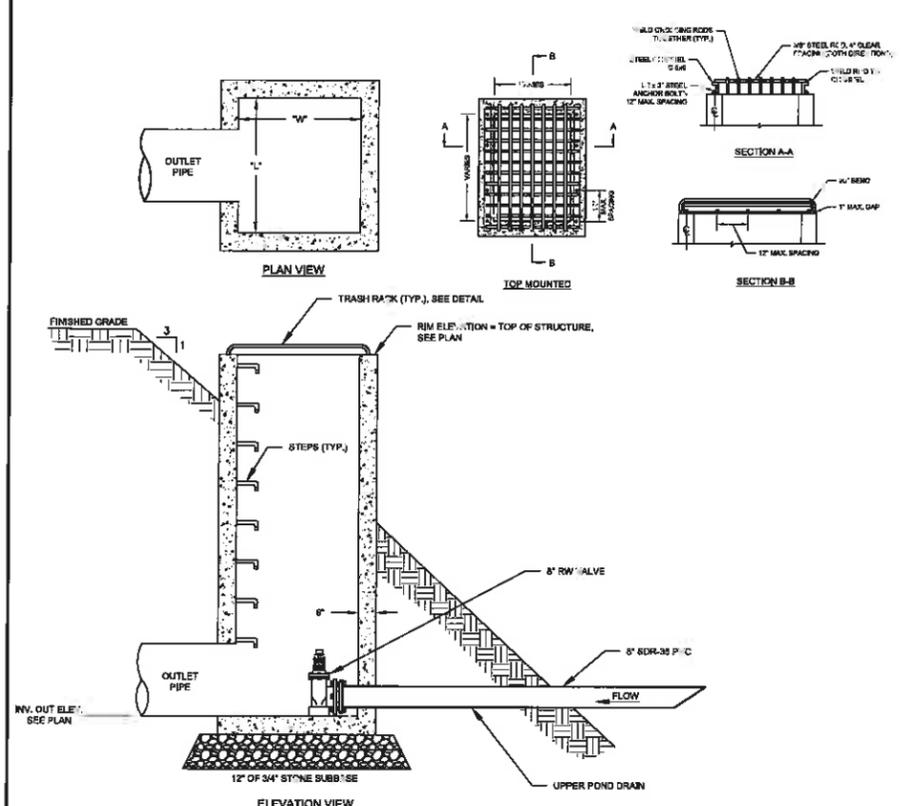
1. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA. EXACT LOCATIONS OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXIST OR EVEN APPROXIMATE LOCATIONS OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS (THE CONTRACTOR'S) RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK.
2. PRIOR TO THE INSTALLATION OF ANY NEW STRUCTURE, PIPELINE OR EQUIPMENT WHICH REQUIRES CONNECTION TO OR CROSSING OF ANY EXISTING STRUCTURE, PIPELINE OR EQUIPMENT, THE CONTRACTOR IS OBLIGATED TO LOCATE SUCH EXISTING STRUCTURE, PIPELINE OR EQUIPMENT TO ASCERTAIN IF SAID ITEM IS IN CONFLICT OR CONTRADICTION TO THE INTENT OF THE CONTRACT PLANS OR SPECIFICATIONS.
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
4. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
5. THE CONTRACTOR SHALL REQUEST AN EXISTING UTILITY MARK OUT PRIOR TO START OF CONSTRUCTION.

SITE DATA

ZONING DISTRICT: "RU" RURAL DISTRICT
 EXISTING LOT SIZE: ±241.23 ACRES
 TAX GRID No.: 132800-7163-00-380110
 PROPERTY ADDRESS: 39 NE MOUNTAIN ROAD
 TOWN OF DOVER, NY
 PROPERTY OWNER: DOUBLE JK RANCH LLC,
 83 JALE HARBOUR DR
 NEW FAIRFIELD, CT 06812

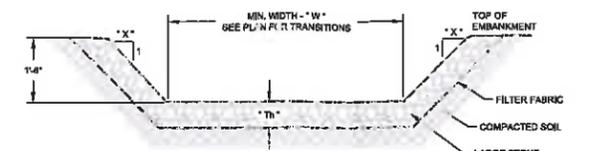
DOUBLE JK RANCH					
TITLE: POND CONSTRUCTION & GRADING PLAN			DATE: 12/13		
SCALE: 1" = 30'	DESIGNER: RAR	CHECKED: RED	DATE: 12-09	SHEET NO. 1 of 3	





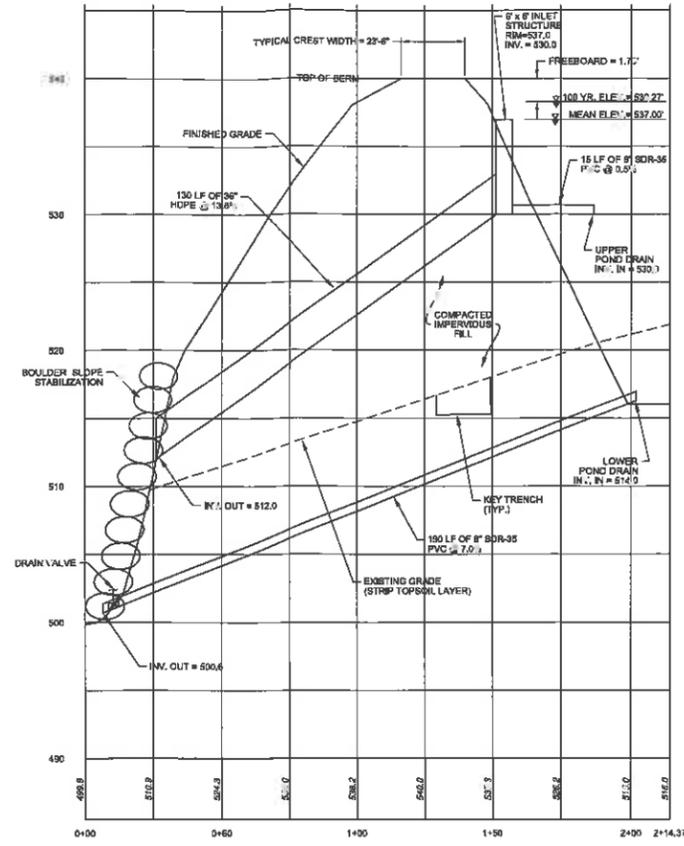
POND OUTLET DETAIL
N.T.S.

- NOTES:**
1. PRECAST CATCH BASIN, FRAME, AND GRATE SHALL BE DESIGNED FOR H-20 LOADING AND MEET NYSDOT SPECIFICATIONS.
 2. PRECAST CONCRETE TOP WITH FRAME AND GRATE MAY NOT BE USED.
 3. ALL PIPES SHALL BE LAID OR CUT FLUSH WITH THE INSIDE OF THE CATCH BASIN WALL AND SHALL BE FIRMLY MORTARED IN PLACE.
 4. BACKFILL SHALL BE SELECT FILL OR R.O.S. GRAVEL COMPACTED IN 6\"/>

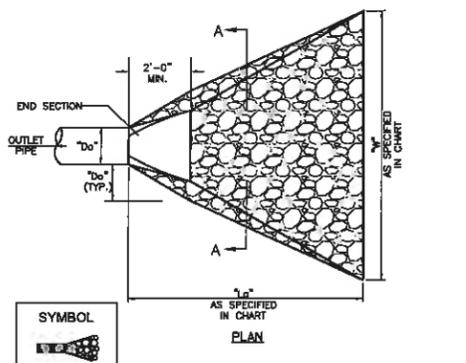


AUXILIARY SPILLWAY DETAIL
N.T.S.

AUXILIARY SPILLWAY SPECIFICATIONS							
SEGMENT	"Th" Thickness	d50	LENGTH (FT)	BOTTOM WIDTH (FT)	TOP WIDTH (FT)	LONGITUDINAL SLOPE (%)	SIDE SLOPE X:1
UPPER	1'-8"	10"	40'	VARIABLE FROM 35' TO 28'	VARIABLE FROM 55' TO 45'	2.0%	3:1
MIDDLE	1'-8"	15"	45'	VARIABLE FROM 25' TO 15'	VARIABLE FROM 48' TO 22'	16.0%	VARIABLE 3:1 TO 2:1
LOWER	1'-8"	15"	50'	15'	21'	20.0%	2:1



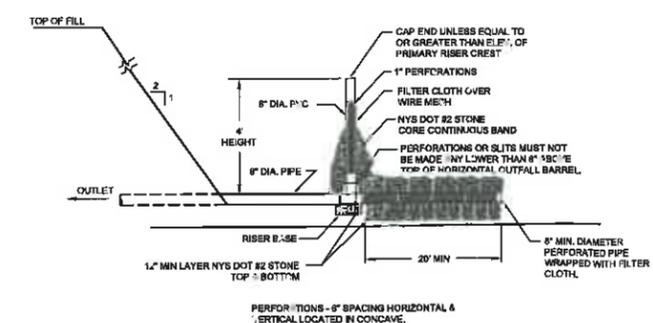
TYPICAL SECTION AT OUTLET STRUCTURE
SCALE: HOR. 1\"/>



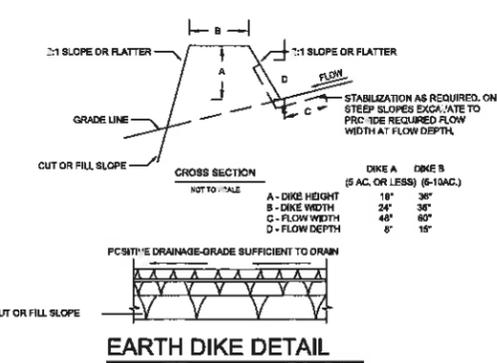
OUTLET PROTECTION DETAIL
N.T.S.

APRON DESIGN SCHEDULE

OUTLET TYPE	"Do"	"Ld"	"W"	d50	"Th"
1	48"	39'-0"	32'-4"	18"	1'-6"

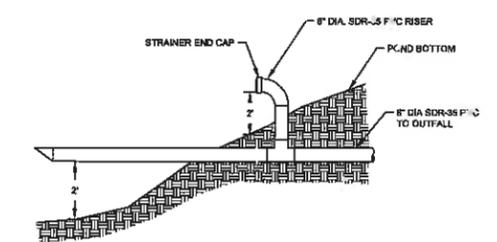


TEMPORARY SEDIMENT TRAP DEWATERING DEVICE DETAIL
N.T.S.

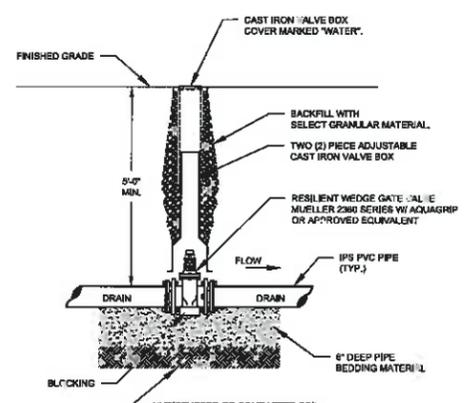


EARTH DIKE DETAIL
N.T.S.

- CONSTRUCTION SPECIFICATIONS**
1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
 2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
 3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
 4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
 5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
 6. STABILIZATION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH.



POND DRAIN INLET DETAIL
N.T.S.



POND DRAIN VALVE & BOX DETAIL
N.T.S.

REDUCED SIZE PLAN NOT TO SCALE

DATE	REVISION

ENGINEERING, DESIGN, & PLANS PREPARED BY:
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CIVIL & ENVIRONMENTAL ENGINEERING
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DOUBLE JK RANCH						
TOWN OF DOVER, DUTCHESS COUNTY, NY						
SITE DETAILS						
DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	JOB NO.	SHEET NO.
1-13-13	AS NOTED	RAR	RED	RAR	12-068	3 of 3