

**BENCHMARKS:**  
 #1: "X" CUT CHISELED ON CURB INLET,  
 8.9' S. & 27.5' W. OF THE NW COR., LOT  
 22, BLOCK 1, QUAIL CROSSING ADDITION,  
 PHASE 2, 22.3' EAST OF @ N. 159TH ST. E.  
 ELEV. = 1370.15 (NAVD88)

#2: "X" CUT CHISELED ON CURB INLET,  
 13.2' S. & 60.1' E. OF THE NE COR., LOT  
 2, BLOCK A, THE RANCH 2ND ADDITION,  
 24.9' WEST OF @ N. 159TH ST. E.  
 ELEV. = 1369.05 (NAVD88)

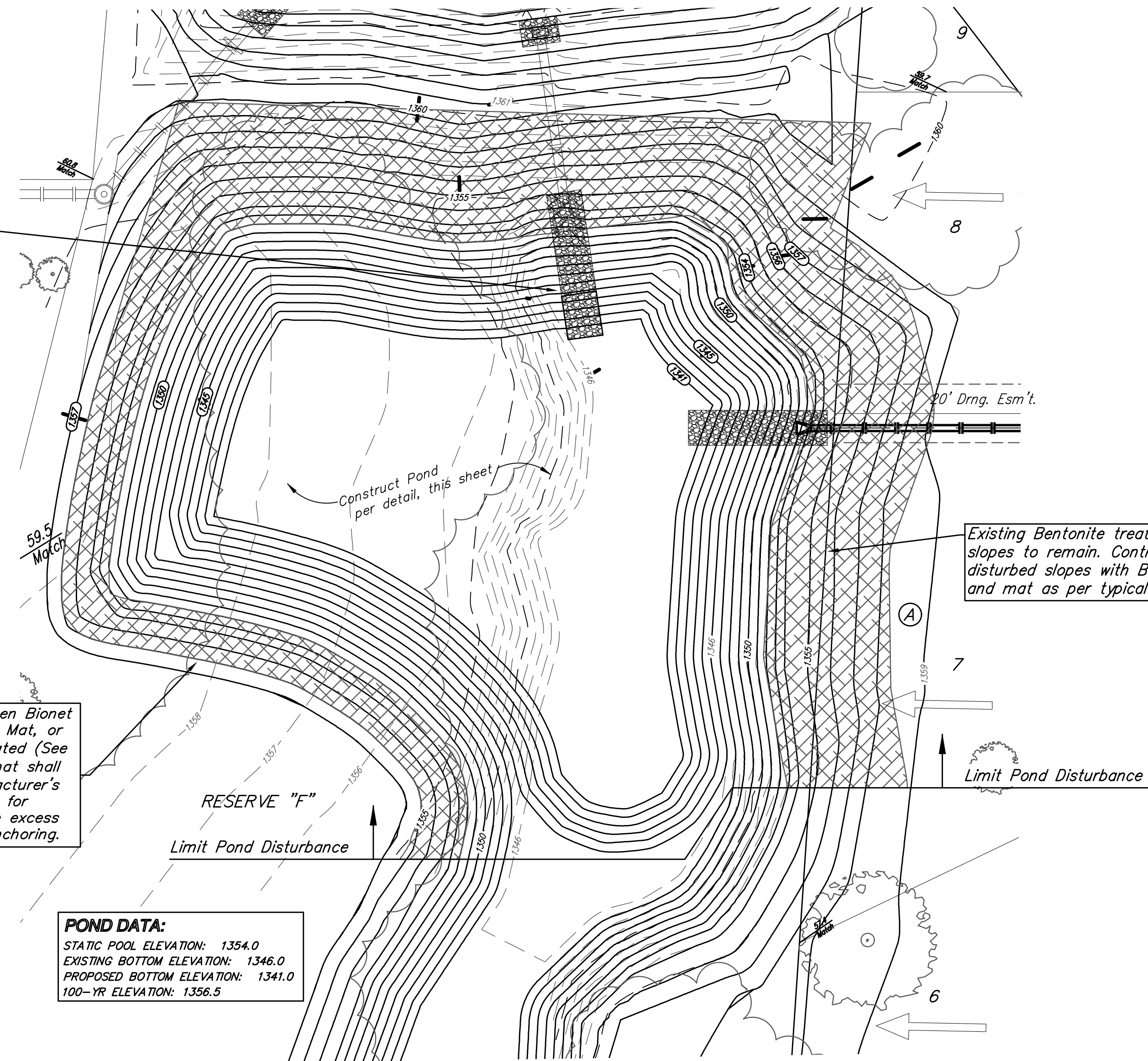
Install 20.0 S.Y. Light Stone  
 Rip-Rap. Maintain 47.0 S.Y.  
 for Total of 67.0 S.Y.  
 See Typical, Sheet 4

Install 2,554 S.Y. North American Green Bionet  
 S150BN Biodegradable Erosion Control Mat, or  
 approved equal around pond as indicated (See  
 Detail, This Sheet) Erosion control mat shall  
 be installed and anchored per manufacturer's  
 specifications. Note: This quantity is for  
 information only and does not include excess  
 material necessary for overlap and anchoring.

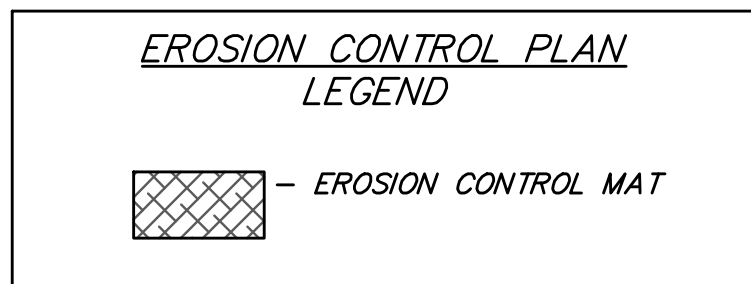
**POND DATA:**  
 STATIC POOL ELEVATION: 1354.0  
 EXISTING BOTTOM ELEVATION: 1346.0  
 PROPOSED BOTTOM ELEVATION: 1341.0  
 100-YR ELEVATION: 1356.5

**POND NOTES:**

- Pond bottom and side slopes below static pool elevation shall be over-excavated 18" and a 12" clay liner shall be compacted to 95% std. density. The top 6" of the clay liner shall be modified with Wyoming Bentonite Clay at a rate of 4%. The plasticity index (P.I.) shall be at least 30. The compaction and P.I. shall be verified during construction. 6" of on-site material shall be distributed on top of the clay line below the static pool elevation. P.I. determination and compaction testing shall be arranged by the contractor at the request of the inspector. All costs for liner material, manipulation, compaction, testing, etc to be included in lump sum bid item, "Pond Sealing". All costs associated with Pond Construction including stripping top soil, excavation, shaping, compaction, hauling excess material, etc. shall be included in the bid item "Excavation".
- All areas disturbed during construction shall be seeded, mulched, and fertilized as per Cover Sheet General Notes.
- Install Erosion Control Mat around Pond as indicated (cost to be included in "Erosion Control Mat")
- Contractor to strip top 4-6" of soil within street right-of-way and Reserve "D" and Reserve "F" before mass grading. Following pond construction, topsoil is to be spread over Reserve "D" and Reserve "F" above static water surface. (incidental to C.Y. "Excavation").
- Compaction of 95% shall be obtained in all areas.
- Earthwork Quantities reflect the best available topography at time of design. The Contractor shall satisfy himself with the Earthwork Quantities associated with Bid Items "Excavation" & "Grading, Mass" prior to bidding. No additional payments or change orders for earthwork will be accepted.



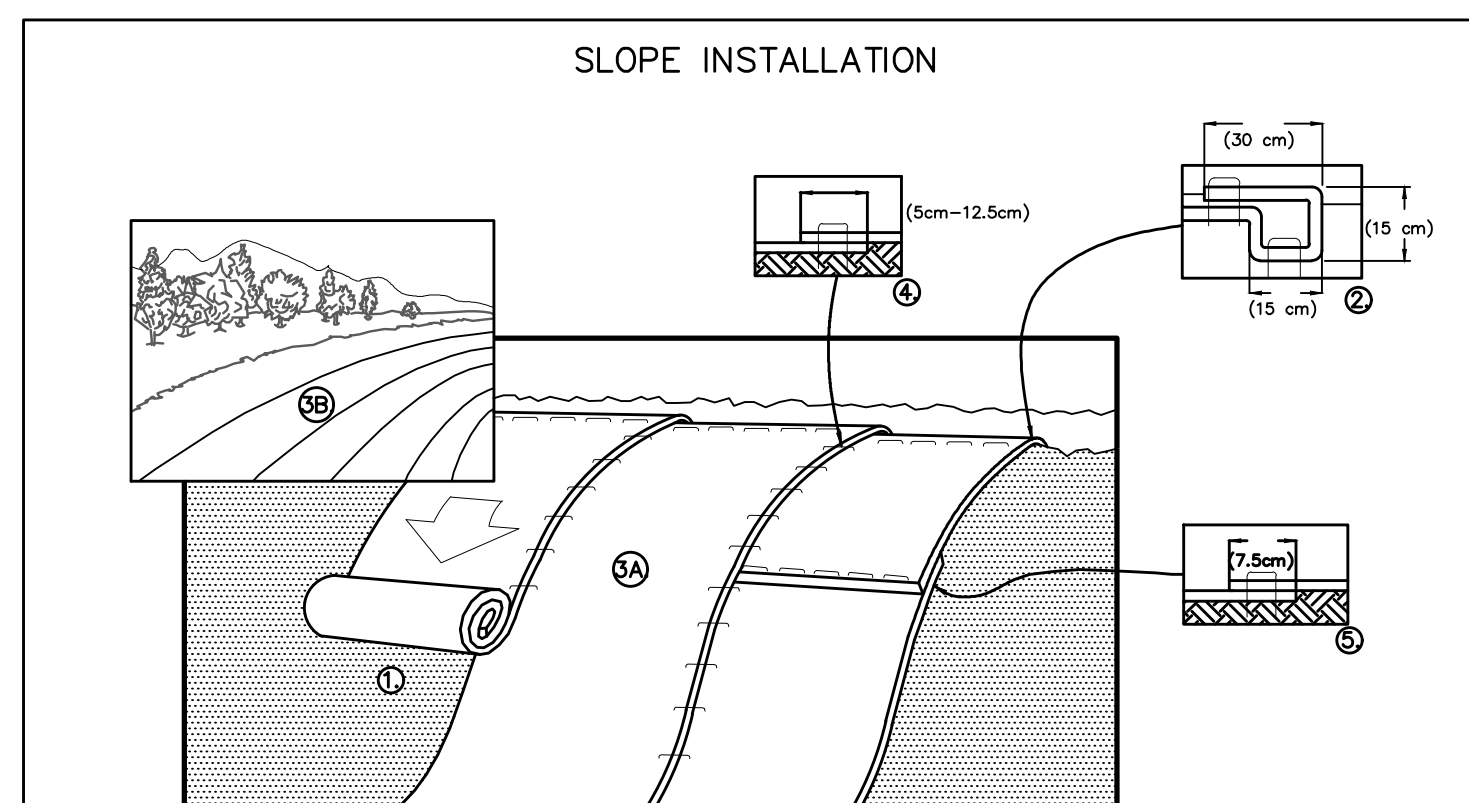
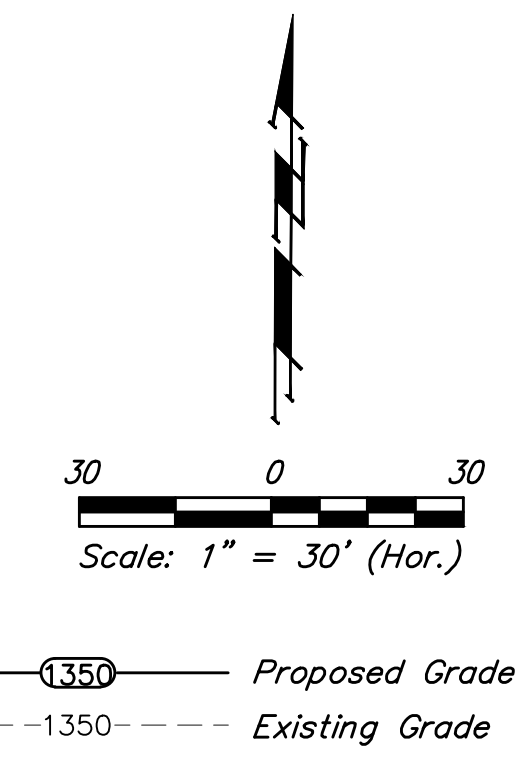
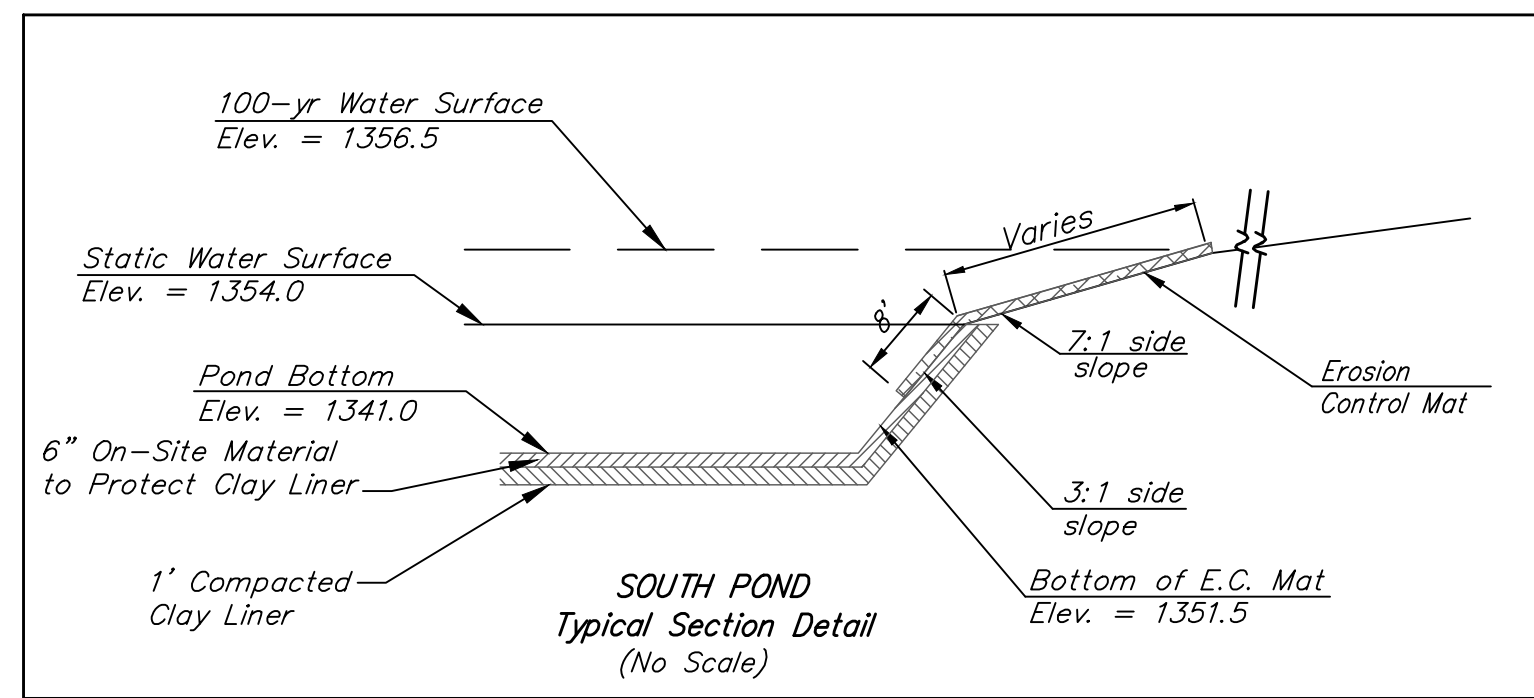
Existing Bentonite treated & stabilized slopes to remain. Contractor to retreat disturbed slopes with Bentonite & re-seed and mat as per typical section & notes.



**EARTH WORK TOTALS (CY, Unadjusted)**  
 \*for information only

	Excavation	Fill
North Pond	8,410	0
South Pond	11,900	0
Mass Grading	7,390	34,660
<b>Total Mass Grading</b>	<b>27,700</b>	<b>34,660</b>

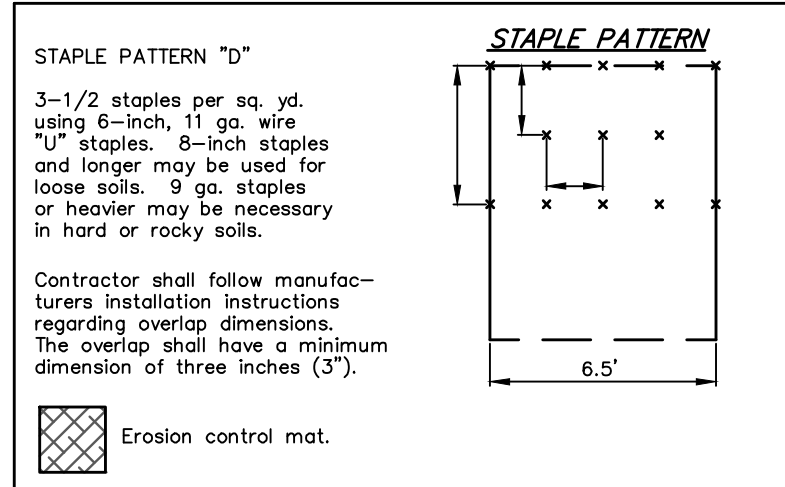
*NOTE: No Contractor Borrow will be required.*



- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:  
 \*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.  
 SEEDING DIRECTLY BENEATH THE EROSION CONTROL MAT SHALL BE INCLUDED IN THE COST OF THE EROSION CONTROL MAT.

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 USA 1-800-772-2040 CANADA 1-800-448-2040  
 www.nogreen.com



**Baughman** The Ranch 2nd Addition  
**POND PLAN**  
 Stormwater Drain Improvements

Baughman Company, P.A. 315 Ellis St. Wichita, KS 67211 P 316-262-7271 F 316-262-0149  
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

PROJECT NUMBER 2019-015117	DESIGN AEG	DRAWN HW
REVISIONS:	APPROVED	DATE 10/07/19
	SCALE Noted	SHEET <b>9 OF 20</b>