

- LEGEND**
- RIPRAP (D₅₀=9")
 - PERMANENT SEEDING
 - BONDED FIBER MATRIX
 - EROSION CONTROL MAT

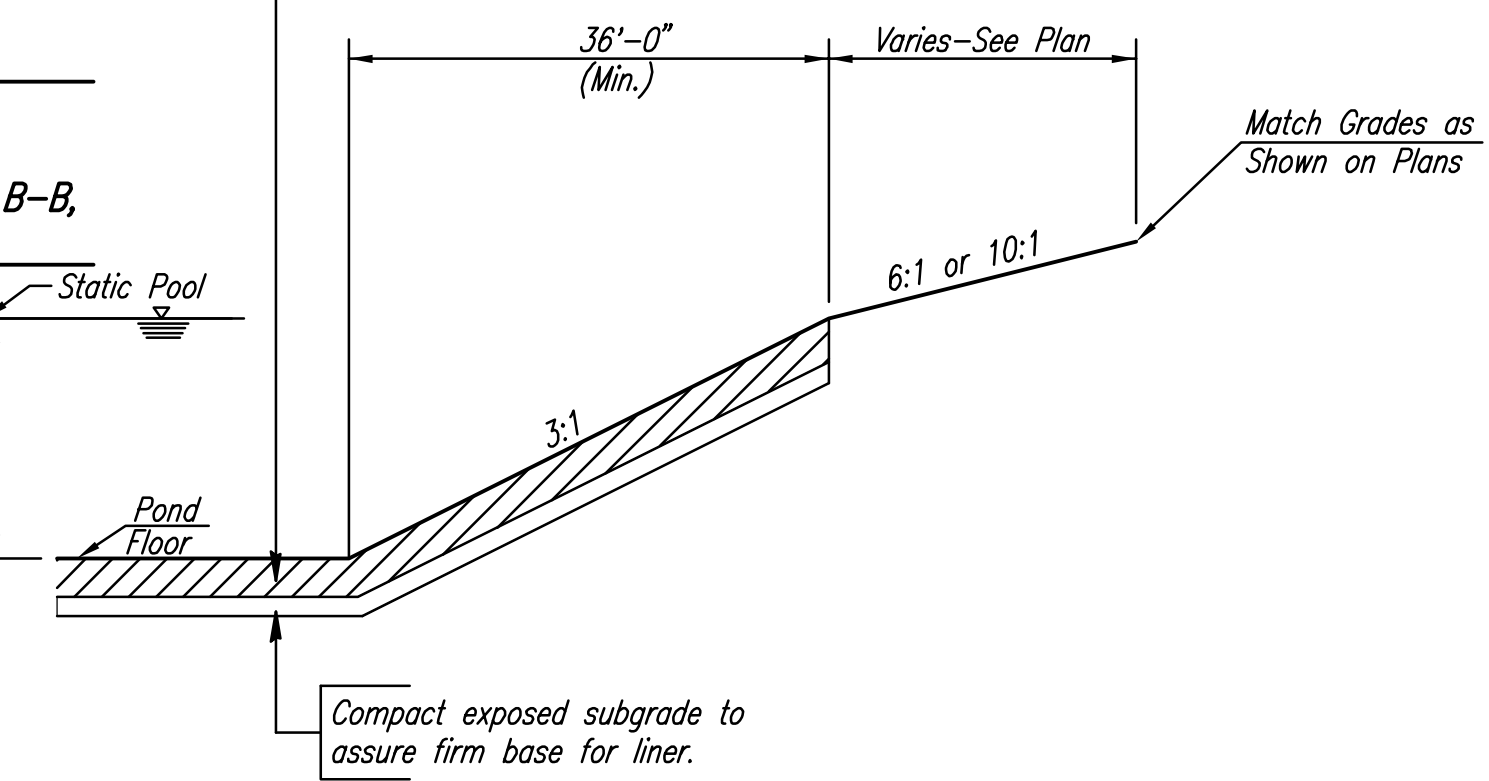
Install 11,026 S.Y. Bonded Fiber Matrix (Wood Hydro Mulch) φ See Section A-A and Section B-B, This Sheet.

Erosion Berm Discharge Point (Typical of 6). Install Erosion Control Mat See Typical Section, This Sheet

Install 3,816 S.Y. Riprap (D₅₀=9") See Section A-A and Section B-B, This Sheet.

Install 1.3 Acres Permanent Seeding (Buffalo) See Section A-A and Section B-B, This Sheet.

1. Construct 12 inches of clay liner.
2. High plasticity clay (PI>25) shall be used.
3. Construct liner in two 6-inch lifts.
4. Compact to 95% of Standard Proctor Density (ASTM D-698).
5. Control moisture within minus 3% to plus 3% of optimum moisture content.



CLAY LINER CONSTRUCTION PROCEDURE FOR POND SEALING

POND SEALING NOTES:

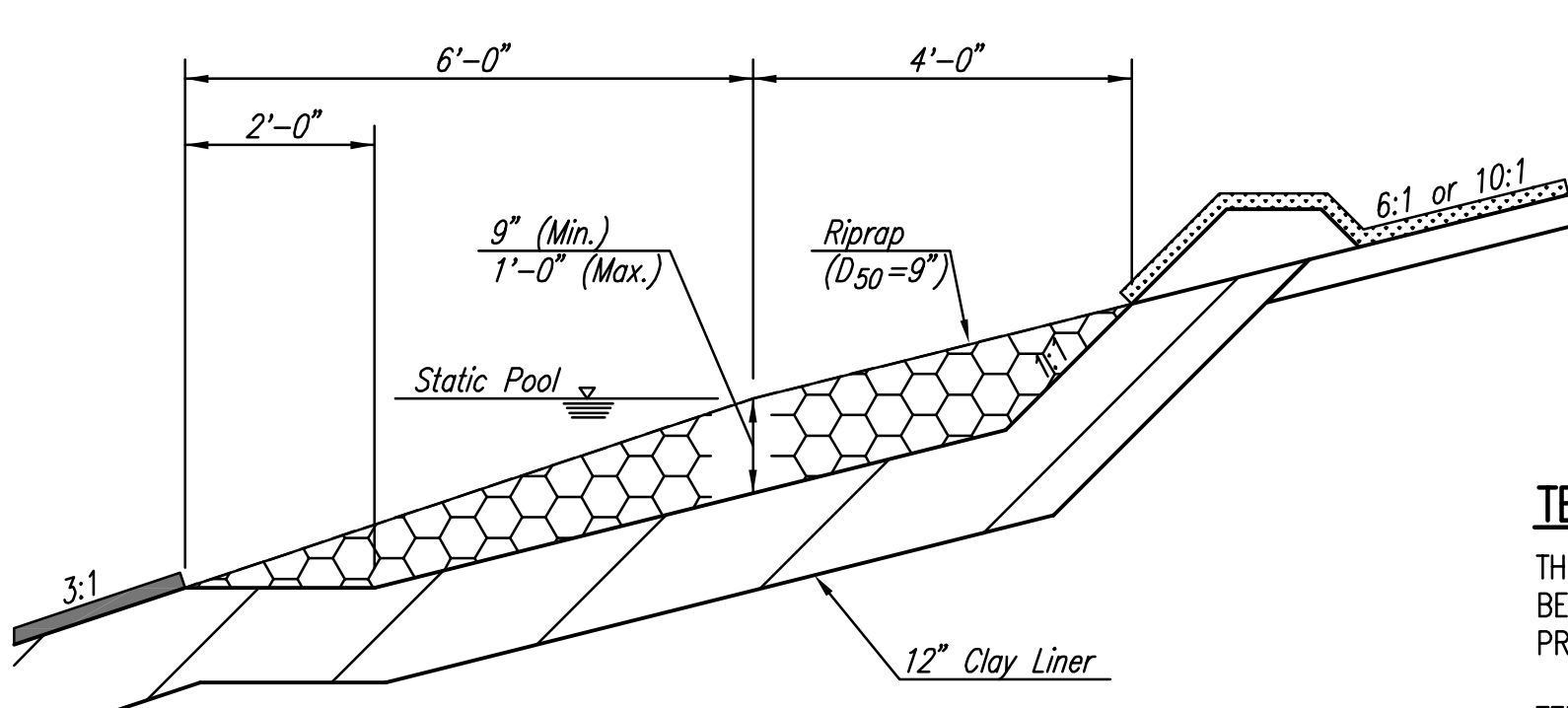
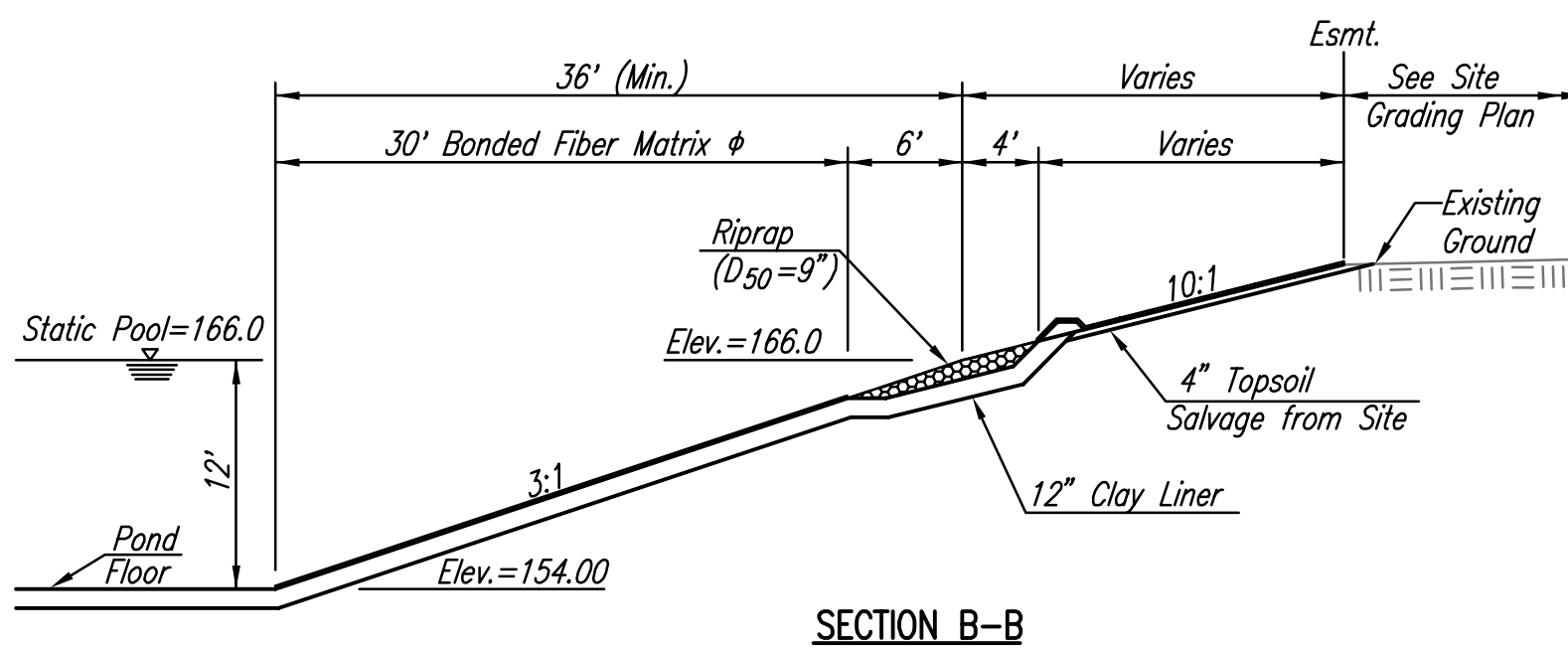
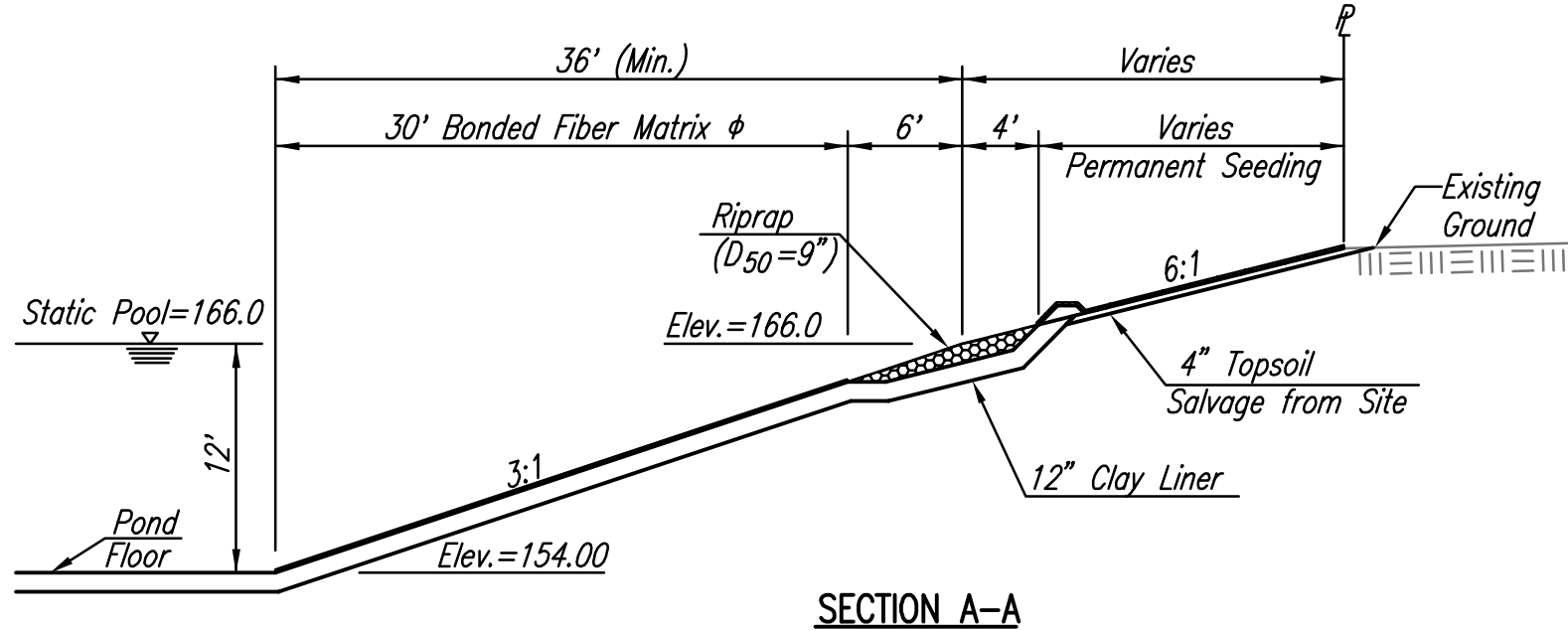
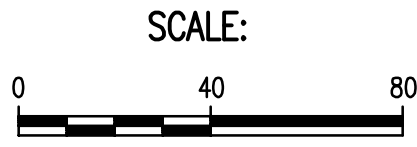
THE POND AREAS BELOW STATIC POOL ELEVATION SHALL BE OVEREXCAVATED TO A DEPTH OF 12 INCHES BELOW THE FINAL POND SURFACE. THE OVEREXCAVATED MATERIAL SHALL BE STOCKPILED FOR RE-USE, UTILIZED IN PROJECT EMBANKMENTS, OR WASTED ON SITE. BACKFILL OVEREXCAVATED AREA WITH HEAVY CLAY MATERIAL (PI>25) AND COMPACT TO 95% STD. DENSITY IN MAXIMUM 6-INCH LIFTS TO PROVIDE AN IMPERVIOUS SURFACE. NO SHALE PERMITTED IN THIS ZONE.

POND SEALING, AS DESCRIBED HEREIN, SHALL BE MEASURED AND PAID FOR BY THE LUMP SUM. THE LUMP SUM BID FOR "POND SEALING" SHALL BE CONSIDERED FULL COMPENSATION FOR ALL OVEREXCAVATION, STOCKPILING, DOUBLE HANDLING OF EARTHWORK (IF NECESSARY), COMPACTING, CORRECTION OF LEAKAGE AS DIRECTED BY THE ENGINEER, AND FOR ALL TOOLS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

POND GRADING NOTES:

CONTRACTOR SHALL PERFORM GRADING AS SHOWN BY CONTOURS AND COORDINATES ON THIS SHEET AND ON SHEET NOS. 7, 9 AND 10. EARTHWORK VOLUMES FOR THIS GRADING HAVE BEEN INCLUDED IN THE BID ITEM "UNCLASSIFIED EXCAVATION".

See Sheet No. 9 for Coordinates List.



TEMPORARY EROSION CONTROL DETAIL FOR SLOPE PROTECTION

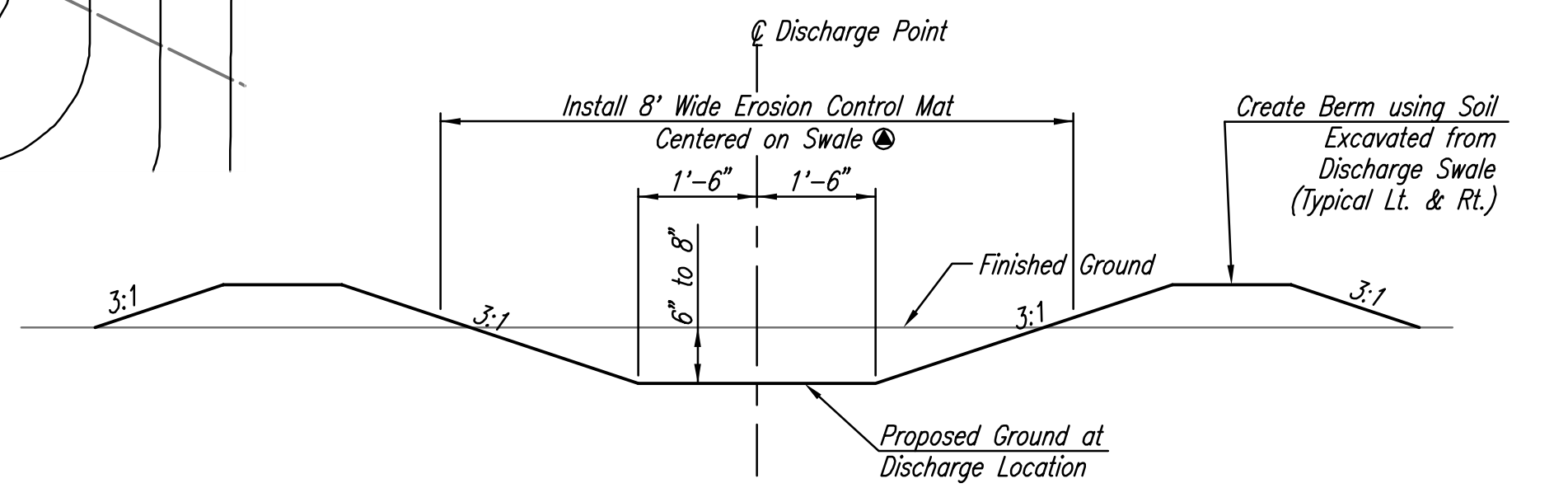
THE ENGINEER MAY DETERMINE THAT THE HEIGHT OF BERM SHOULD BE INCREASED OVER THAT SHOWN IF DRAINAGE CONDITIONS ARE PRODUCING EROSION.

TEMPORARY EROSION CONTROL BERMS SHALL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

AT REGULAR INTERVALS OF NO GREATER THAN 250 FT, AND WHERE FLOW IS CONCENTRATED, SUCH AS THE CORNERS OF THE POND, OR AS DIRECTED BY THE ENGINEER, PROVIDE BREAKS IN THE BERM TO ALLOW CONTROLLED DISCHARGE OF TRAPPED WATER. DISCHARGE LOCATIONS SHALL BE PROTECTED AS NECESSARY TO PREVENT SLOPE EROSION. SEE TYPICAL SECTION

ALL AREAS WHERE FLOW IS CONCENTRATED SHALL BE PROTECTED BY SILTATION BARRIERS PRIOR TO DISCHARGING INTO ANY DITCH, STORM SEWER, OR WATERCOURSE, AS APPROVED BY THE ENGINEER.

MEASUREMENT AND PAYMENT: THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO "UNCLASSIFIED EXCAVATION".



TYPICAL SECTION (Erosion Berm Discharge Point)

EROSION CONTROL MAT SHALL BE LANDLOK TRM 450, NORTH AMERICAN GREEN C350 OR EQUIVALENT. INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

PAID FOR AS S.Y. "EROSION CONTROL MAT" AS INDICATED IN PLANS. THE BID PRICE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

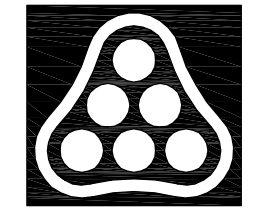
RIPRAP (D₅₀=9") NOTES

RIPRAP MATERIALS SHALL MEET THE REQUIREMENTS FOR QUALITY AND DELETERIOUS SUBSTANCES AS SET FORTH IN SUBSECTION 1114 OF STANDARD SPECIFICATIONS FOR STATE ROAD AND BRIDGE CONSTRUCTION, KANSAS DEPARTMENT OF TRANSPORTATION, 2007 EDITION.

SHALL BE PAID FOR AS SQUARE YARD "RIPRAP (D₅₀=9") AS INDICATED ON PLANS.

φ BONDED FIBER MATRIX (WOOD HYDROMULCH) SHALL BE SPRAYMATT OR APPROVED EQUAL.

PAID FOR AS S.Y. "BONDED FIBER MATRIX" AS INDICATED IN PLANS AND INCLUDES RYEGRASS SEED INSTALLED AT 5 LBS. PER 1,000 SQUARE FEET. THE BID PRICE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.



No.	Revision	By	Date
FONTANA 4TH ADDITION-PHASE 1 STORM WATER DRAIN NO. 282 GRADING PLAN-POND 4 JAMES L. ARMOUR, P.E.- CITY ENGINEER CITY OF WICHITA PROJ. NO. 468-84121 Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	BMM	Job No.	35-08389-003
Drawn by	BJS	Date	July 2008
			Sheet 8 of 29

Scaled 11-12-2010 4:46:21 PM by BJS
 Plot Scale 1:40 11-12-2010 4:47:12 PM by BILL J. SECKSON
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