



CORPORATE OFFICE
4940 OLD COLLINSVILLE RD.
SWANSEA, ILLINOIS 62226
TEL (618) 624-4488
FAX (618) 624-6688
corp@twm-inc.com

WATERLOO OFFICE
113 SOUTH MAIN STREET
WATERLOO, ILLINOIS 62298
TEL (618) 939-5050
FAX (618) 939-3938
waterloo@twm-inc.com

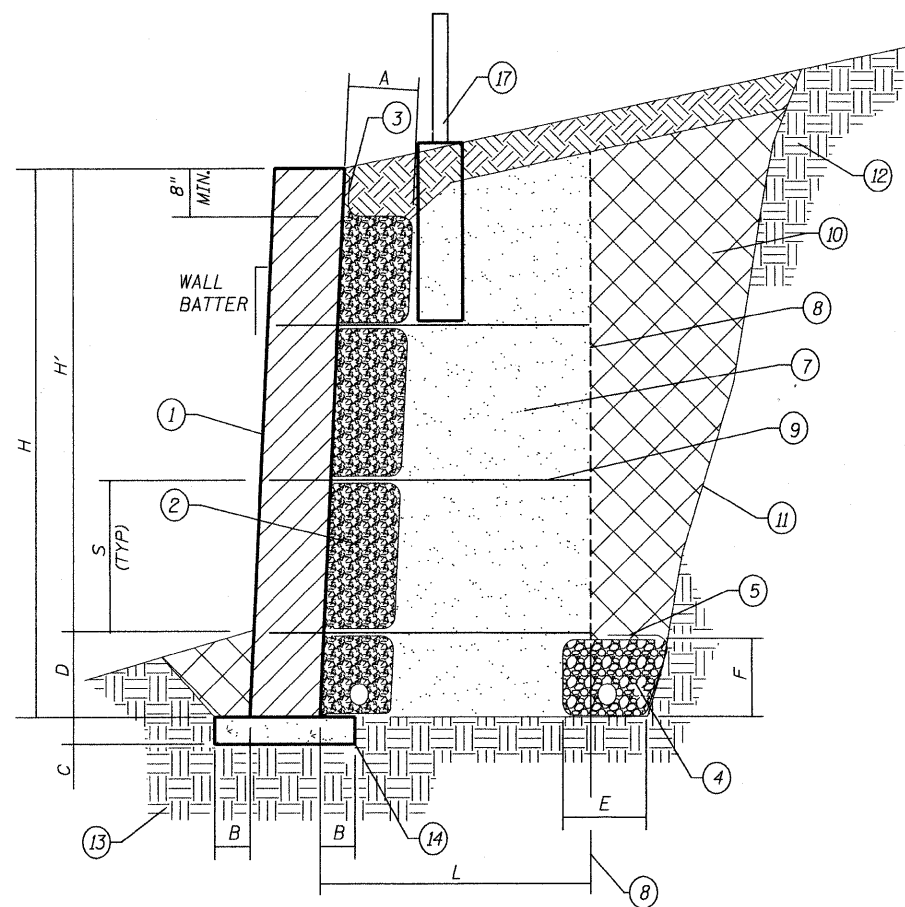
ST. LOUIS OFFICE
1001 CRAIG ROAD, SUITE 260
ST. LOUIS, MISSOURI 63146
TEL (314) 236-5052
FAX (314) 872-2194
stlouis@twm-inc.com

PROFESSIONAL REGISTRATIONS	LICENSE NO.
ILLINOIS PROFESSIONAL DESIGN FIRM	184-001220
PROFESSIONAL ENGINEERING CORP.	62-035370
PROFESSIONAL STRUCTURAL ENGR. CORP.	81-005202
ILLINOIS PROF. LAND SURVEYING CORP.	048-000029
MISSOURI PROFESSIONAL ENGR. CORP.	NC 001528
MISSOURI LAND SURVEYING CORP.	NC 000346

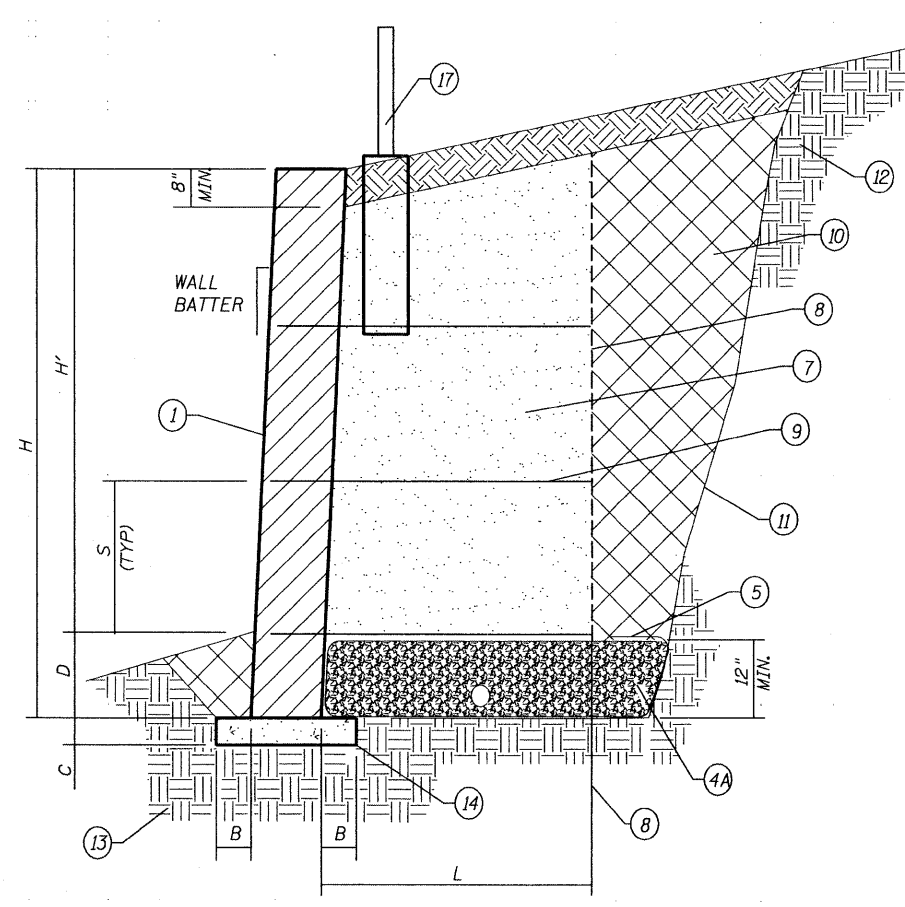
SEAL

Signature: _____
Signature Date: _____
Expiration Date: _____

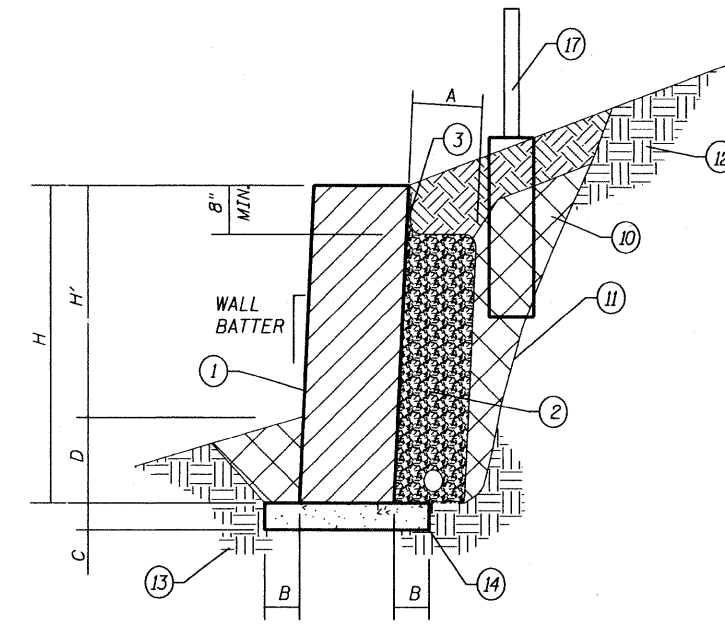
STATEMENT OF RESPONSIBILITY
I hereby confirm that the document herein to be authenticated by my seal is restricted to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be utilized for any other part of the architectural, engineering or survey project.



MSE SRW DRAINAGE ALTERNATIVE 1



MSE SRW DRAINAGE ALTERNATIVE 2



GENERIC SRW GRAVITY WALL SECTION

GENERIC MSE SRW SECTIONS

GENERIC WALL SECTION NOTES

- ① CONCRETE SRW UNITS.
- ② SRW UNIT DRAINAGE SYSTEM SHALL CONSIST OF DRAINAGE FILL ENTIRELY WRAPPED IN FILTER FABRIC AND A 4" PERFORATED PIPE AS SHOWN.
- ③ LAP FILTER FABRIC FIRMLY AGAINST SRW UNITS AND 6" ABOVE THE DRAINAGE FILL.
- ④ MINIMUM RETAINED FILL DRAINAGE SHALL BE A 4" PERFORATED PIPE WITHIN 18"x18" DRAINAGE FILL CONTINUOUS THE ENTIRE LENGTH OF THE WALL AND ENTIRELY WRAPPED WITH FILTER FABRIC.
- ④A ALTERNATIVE 2 DRAINAGE SYSTEM SHALL CONSIST OF DRAINAGE FILL WRAPPED ENTIRELY IN FILTER FABRIC AND A 4" PERFORATED PIPE AND SHALL EXTEND FROM THE BACK OF THE SRW UNITS TO THE EXCAVATION LIMIT.
- ⑤ LAP THE FILTER FABRIC 8" MINIMUM OVER THE TOP AND AT ENDS OF ADJACENT SHEETS.
- ⑥ THE DRAINAGE DETAILS ARE MINIMUM REQUIREMENTS. THE RETAINING WALL ENGINEER SHALL APPROVE THE USE OF THESE MINIMUMS, OR SHALL SPECIFY DRAINAGE OF GREATER EXTENT AND CAPACITY, OR SPECIFY ITEMS IN ADDITION TO THE MINIMUMS SUCH AS DRAINAGE GEO. COMPOSITES BEHIND THE REINFORCED BACKFILL. MSE WALL DRAINAGE ALTERNATIVES MAY BE OMITTED FROM MSE WALLS WHEN THE REINFORCED BACKFILL IS DRAINAGE FILL, IS ENTIRELY WRAPPED IN FILTER FABRIC, AND CONTAINS A 4" PERFORATED DRAIN PIPE.
- ⑦ REINFORCED BACKFILL
- ⑧ LIMIT OF REINFORCED BACKFILL. ENTIRELY WRAP THE REINFORCED BACKFILL WITH FILTER FABRIC WHEN THE REINFORCED BACKFILL IS A GAP GRADED COURSE AGGREGATE AND HAS LESS THAN 30% PASSING THE NO. 4 SIEVE.
- ⑨ BACKFILL REINFORCEMENT. THE BACKFILL REINFORCEMENT SHALL BE CONTINUOUS WITHOUT GAP ALONG THE LENGTH OF WALL THAT REQUIRES BACKFILL REINFORCEMENT. THE BACKFILL REINFORCEMENT SHALL BE ONE PIECE FULL LENGTH (NO SPLICES) FROM THE POINT OF CONNECTION TO THE SRW UNITS TO THE LIMIT OF THE REINFORCED FILL BEHIND THE WALL.
- ⑩ COMPACTED EMBANKMENT, WHERE SPECIFIED BY THE RETAINING WALL ENGINEER.
- ⑪ EXCAVATION LIMITS.
- ⑫ EXISTING EMBANKMENT.
- ⑬ FOUNDATION SOIL.
- ⑭ LEVELING PAD.
- ⑮ ALL VOIDS IN OR BETWEEN SRW UNITS SHALL BE FILLED WITH DRAINAGE BACKFILL MATERIAL.
- ⑯ DRAIN PIPES SHALL BE SLOPED 1/8" PER FOOT MINIMUM AND SHALL BE DISCHARGED EVERY 100 FEET MAXIMUM AT LOW POINTS ALONG THE TOE OF THE WALL.
- ⑰ FENCE POST DETAILS TO BE DETERMINED BY THE RETAINING WALL ENGINEER.

GENERIC WALL SECTION DIMENSIONS	
A	12" MINIMUM, GREATER IF REQUIRED BY THE RETAINING WALL ENGINEER
B	6" MINIMUM, GREATER IF REQUIRED BY THE RETAINING WALL ENGINEER
C	6" MINIMUM, GREATER IF REQUIRED BY THE RETAINING WALL ENGINEER
D	WHICHEVER IS GREATER: 24" OR THAT SPECIED BY THE RETAINING WALL ENGINEER
E	18" MINIMUM, GREATER IF REQUIRED BY THE RETAINING WALL ENGINEER
F	18" MINIMUM, GREATER IF REQUIRED BY THE RETAINING WALL ENGINEER
L	.6 H MINIMUM, GREATER IF REQUIRED BY THE RETAINING WALL ENGINEER
S	24" MAXIMUM
WALL BATTER	AS REQUIRED BY THE RETAINING WALL ENGINEER

SOIL DESIGN PARAMETERS			
SOIL	ANGLE OF INTERNAL FRICTION	UNIT WEIGHT (pcf)	BEARING CAPACITY (tsf)
REINFORCED BACKFILL	34°	120	N/A
RETAINED FILL	28°	120	N/A
FOUNDATION SOIL		N/A	

NOTE: COHESION SHALL BE ASSUMED TO BE 0 FOR RETAINED FILL AND FOUNDATION SOIL.

SEGMENTAL CONCRETE BLOCK WALL DETAILS

SEIBERT ROAD RECONSTRUCTION - PHASE II VILLAGE OF SHILOH ST. CLAIR COUNTY, ILLINOIS

REV	DATE	DESCRIPTION

DRAWN BY: KBF	SHEET
DESIGNED BY: KPC	12
CHECKED BY: KPC	
APPROVED BY: KPC	
PROJECT NUMBER: 120010479	
OF 35 SHEETS	
<input type="checkbox"/> ISSUED FOR REVIEW	<input type="checkbox"/> ISSUED FOR BIDDING
<input type="checkbox"/> ISSUED FOR CONSTR.	<input type="checkbox"/> RECORD DRAWING

PLOT DATE = 1/6/2009
 FILE NAME = I:\Projects\97325\Phase II Plans\010479\RET WALL-DETAIL-2.dgn
 PLOT SCALE = 20.0000 / IN.
 USER NAME = machauer_john