SSL

Specializing in Construction Products

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GENERAL NOTES

DESIGN CRITERIA

- 1. DESIGN IS BASED ON THE ASSUMPTION THAT MATERIAL WITHIN THE REINFORCED SOIL VOLUME, METHODS OF CONSTRUCTION AND QUALITY OF PREFABRICATED MATERIALS SHALL CONFORM TO THE CONTRACING AGENCY'S TECHNICAL SPECIFICATIONS FOR MSE EARTH WALLS.
- 2. FACTORS OF SAFETY

OVERTURNING = 2.0 INTERNAL PULLOUT = 1.5 (ALLOW DEFORMATION OF 3/4") OVERAL STABLITTY = 1.5 SLIDING = 1.5 BEARING = 2.5

ALLOWABLE STRESS IN REINFORCING MESH AT END OF DESIGN LIFE = 0.47 Fy

3. SOIL CHARACTERISTICS ASSUMED FOR DESIGN:

SOIL PARAMETERS:

SEE WALL CONTROL DRAWINGS FOR SOIL CHARACTERISTICS OF FOUNDATION MATERIAL TO BE USED IN THE DESIGN OF THE WALL SYSTEM, THE CONTRACTOR SHALL PROVIDE SOIL DESIGN PARAMETERS FOR BACKFILL MATERIAL BASED ON THE ACTUAL SOIL CHARACTERISTICS UTILIZED AT THE SITE, THE VALUES OF ϕ , C, AND γ SHALL BE PROVIDED IN THE SHOP DRAWINGS.

- I. THE MAXIMUM APPLIED BEARING PRESSURE AT THE FOUNDATION LEVEL IS AS SHOWN ON THE WALL ELEVATIONS FOR EACH DESIGN CASE. IT IS THE RESPOSIBILITY OF OTHERS TO DETERMINE THAT THIS APPLIED BEARING PRESSURE IS ALLOWABLE FOR THAT LOCATION.
- ANY UNSUITABLE FOUNDATION MATERIAL BELOW THE REINFORCED SOIL VOLUME, AS DETERMINED BY THE ENGINEER, SHALL BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE STABILIZED AS DIRECTED BY THE ENGINEER.

REINFORCING ELEMENTS

6. REINFORCING MESH ELEMENTS SHALL BE SHOP FABRICATED FROM COLD DRAWN STEEL ROD CONFORMING TO THE MINIMUM REQUIREMENTS OF ASTM A-82 AND SHALL BE WELDED AT THE JUNCTIONS BETWEEN LONGITUDINAL AND TRANSVERSE WIRES IN ACCORDANCE WITH ASTM A-185. GALVANIZATION SHALL BE APPLIED AFTER MESH FABRICATION AND BENDING AND SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF ASTM A-123.

DESIGN

 THE DESIGN CONTAINED ON THESE DRAWINGS IS BASED ON INFORMATION PROVIDED BY OTHERS. ON THE BASIS OF THIS INFORMATION, SSL CONSTRUCTION IS RESPONSIBLE FOR INTERNAL STABILITY OF THE STRUCTURE ONLY. EXTERNAL STABILITY DESIGN INCLUDING FOUNDATION AND SLOPE STABILITY IS THE RESPONSIBILITY OF OTHERS.

WALL CONSTRUCTION

- 8. CURVES IN THE WALL WILL BE FORMED BY A SERIES OF SHORT CORDS, OF 4' 11 1/4" EACH, TO MATCH THE DESIRED WALL ALIGNMENT.
- 9. FOR LOCATION AND ALIGNMENT OF MSE WALLS, SEE WALL CONTROL DRAWINGS.
- 10. IF MANHOLES AND DROP INLETS ARE PRESENT, THEY SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS.
- 11. IF PILES ARE LOCATED WITHIN THE REINFORCED SOIL VOLUME, THEY SHALL BE DRIVEN PRIOR TO CONSTRUCTION OF THE MSE WALL, UNLESS A METHOD TO PROTECT THE STRUCTURE, WHICH IS ACCEPTABLE TO SSL CONSTRUCTION AND THE ENGINEER, IS PROPOSED AND APPROVED IN WRITING.
- 12. BACKFILL MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH SPECIFICATION SECTION 548 TO A LEVEL OF 2' (+/-) ABOVE THE MESH CONNECTION IN THE PANELS. INSTALLATION OF REINFORCING MESH SHALL BE PERMITTED ONLY AFTER PLACEMENT AND COMPACTION OF THE BACKFILL MATERIAL HAS REACHED THE REQURIED LEVEL.
- 13. WALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 548.
- 14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF ANY GUARDRAIL POSTS BEHIND THE MSE PANELS. PRIOR TO PLACEMENT OF THE TOP LAYER OF REINFORCING MESH, INDIVIDUAL REINFORMING MESH MAY BE CUT AND SKEWED TO AVOID THE POST LOCATIONS IF AUTHORIZED BY THE ENGINEER ON THE SHOP DRAWINGS. NO CUTTING OF REINFORCING MESH IS ALLOWED UNLESS SHOWN ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER. THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL REPAIR ANY DAMAGE DONE TO THE REINFORCING MESH DUE TO THE INSTALLATION OF GUARDRAIL POSTS.

WALL CONSTRUCITON CON'T

- IF EXISTING STRUCTURES, PIPES, FOUNDATIONS, OR GUARDRAIL POSTS, WHICH PLACEMENT OF REINFORCING MESH AND SPECIFIC DIRECTION HAS NOT BEEN F DETERMINE WHAT COURSE OF ACTION SHOULD BE TAKEN.
- 16. TOP PANELS, BENEATH PRECAST COPING, SHALL BE CAST TO FOLLOW THE PRO
- 17. FOR ADDITIONAL INFORMATION PERTAINING TO WALL CONSTRUCITON PLEASE F
- THE CONTRACTOR IS RESPONSIBLE FOR GRADUALLY DEFLECTING UPPER REINI PREPARATION. THE CONTRACTOR'S ATTENTION IS DIRECTED ESPECIALLY TO SI
- IF WALL DESIGN HEIGHT IS IN EXCESS OF 20' 0", THE FINISHED GRADE IN FRONT THE WALL EXCEEDS 20/ - 0". FINISHED GRADE SHALL BE COMPACTED TO 95% OF

MATERIALS NOTES

NOMINAL MESH LENGTHS

20. THE REINFORCING MESH LENGTH SHOWN ON THE PLANS, MEASURED FROM BA ACTUAL FABRICATED REINFORMING MESH LENGTHS ARE OFTEN LONGER (UP TO GRANULAR BACKFILL IS EQUAL TO THE NOMINAL REINFORCING MESH LENGTH. IS NOT REQUIRED BY CALULATIONS.

REINFORCED BACKFILL QUANTITY

21. THE REINFORCED BACKFILL QUANTITIY INDICATED BY SSL CONSTRUCTION IS CA BY THEIR TRIBUTARY WALL SURFACE AREA AND CONVERTING THE RESULT TO A CONTRACTOR'S INFORMATION ONLY AND IS NOT INTENDED TO PRESENT THE AC CALCULATE HIS OWN EXCAVATION AND BACKFILL QUANTITIES BASED UPON THE

PANEL FINISH

22. THE FINISH OF THE PRECAST PANEL SHALL BE PLAIN STEEL FORM FINISH UNLES

NOTE TO CONTRACTORS

23. ONLY THE FOLLOWING MATERIALS ARE SUPPLIED BY SSL CONSTRUCITON.

PRECAST PANEL (PER SPECIFICATION SECTION 548) REINFORCING MESH & CONNECTION PIN HDPE BEARING PAD (NOMINAL 4.0 MELT / .950 DENSITY) NON-WOVEN FILTER CLOTH AND ADHESIVE (FOR PANEL JOINTS ONLY)

ANY OTHER MATERIALS CALLED FOR IN THE CONTRACT PLANS OR SPECIFICATIC THE INTERFACE OF PRECAST PANELS AND CAST-IN-PLACE CONCRETE STRUCTU PAINTING, SEALERS OR OTHER SPECIALLY APPLIED COATINGS ARE ALSO SUPPLI

24. SSL CONSTRUCTION SUPPLIES PRECAST CONCRETE FACING PANELS AND ACCE CONSTRUCTION OF THE MSE WALLS DETAILED HERIN. THE CONSTRUCTION AND INTEDED TO PROVIDE GENERAL EXPLANATION OF THE SYSTEM. IT IS THE CONT SEQUENCE, PANEL UNLOADING, HANDLING AND BRACING SYSTEM, AND FALL PR CONTROL PROCEDURES MANUAL IS GENERAL IN NATURE AND DOES NOT ACCOL MANUAL DOES NOT RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITY TO ADH COMPLIANCE WITH ALL FALL PROTECTION, SAFETY, LAWS, STANDARDS, AND PRC PREVENT THE PANELS FROM SHIFTING OR FALLING DURING THE ERECTION PRO

DATE : 01-01-05



THE DESIGN OF ALL MSE PLUS[®] WALLS IS BASED ON THE ASSUMPTION THAT ALL MATERIALS, INCLUDING THE BACKFILL AND METHODS OF CONSTRUCTION, CONFORM TO THE SPECIFICATIONS FOR MSE PLUS[®] RETAINING WALLS AND THE PROJECT BID DOCUMENTS THESE DRAWINGS, AS WELL AS THE DESIGN, ARE CERTIFIED WITH RESPECT TO THE INTERNAL STABILITY OF THE MSE PLUS[®] STRUCTURES ONLY, EXTERNAL STABILITY INCLUDING, BUT NOT LIMITED TO, SLOPE AND FOUNDATION STABILITY IS THE RESPONSIBILITY OF THE OWNER AND THE ENGINEER FOR THE OWNER.

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NOTES:

- 1. ADDITIONAL CONCRETE AND REINFORCING STEEL REQUIRED FOR THE CONSTRUCTION OF THE PILASTER SHALL MEET THE SAME REQUIREMENTS AS THAT OF THE PARAPET WALL.
- 2. TOP OF PILASTER SHALL BE FINISHED TO A TRUE LEVEL AREA.
- 3. LIGHT POLE PILASTER IS DESIGNED TO RESIST WORKING LOADS (IN ANY DIRECTION) FROM THE LIGHT POLE APPLIED
- AT THE TOP OF THE PILASTER AS FOLLOWS: LONGITUDINAL MOMENT = 30,000 FT. - POUNDS TRANSVERSE MOMENT = 6000 FT. - POUNDS LONGITUDINAL SHEAR = 1000 POUNDS TRANSVERSE SHEAR
- = 200 POUNDS TORSION = 3,000 FT. - POUNDS AXIAL = 400 POUNDS
- IF THE LIGHT POLE PROVIDED APPLIES LOADS THAT ARE IN EXCESS OF THOSE SHOWN ABOVE. THE CONTRACTOR SHALL REDESIGN THE PILASTER AND SUBMIT HIS DESIGN TO THE DEPARTMENT FOR REVIEW. THE CONTRACTOR'S REDESIGN SHALL BE PREPARED SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA QUALIFIED TO PERFORM THE WORK.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANCHOR BOLTS THAT EFFECTIVELY TRANSMIT THE LIGHT POLE LOADS TO THE PILASTER AND THAT FIT THE REINFORCING CAGE. CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA SHALL BE SUBMITTED BY THE CONTRACTOR TO THE DEPARTMENT FOR REVIEW AND APPROVAL SHOWING THAT THESE REQUIREMENTS HAVE BEEN MET PRIOR TO CONSTRUCTION.









THESE DRAWINGS, AS WELL AS THE DESIGN, ARE CERTIFIED WITH RESPECT TO THE INTERNAL STABILITY OF THE MSE PLUS[®] STRUCTURES ONLY, EXTERNAL STABILITY INCLUDING, BUT NOT LIMITED TO, SLOPE AND FOUNDATION STABILITY IS THE RESPONSIBILITY OF THE OWNER AND THE ENGINEER FOR THE OWNER.





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TOP OF BARRIER

NOTES: OBSTRUCTION SHALL VOID FORMER SHALL VOID FORMER NOT SI ALL OBSTRUCTIONS CAST-IN-PLACE BAR DAMAGED GALV. SHAL

REVISED MESH TO

PARTIAL PLAN - JUNCTION SLAB AROUND INLET

OBSTRUCTION DETAIL (HORIZONTAL)

MESH IS NOT TO BENT WITH LESS THAN A 6"RADIUS TO AVOID DAMAGE TO GALVANIZING.

DATE : 01-01-05

INTERIM STANDARD IN ENGLISH UNITS APPLICABLE TO DESIGN STANDARDS BOOKLET PUBLISHED IN EITHER ENGLISH OR METRIC UNITS.

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