DESIGN NOTES

1. Design is based on the assumption that backfill within the reinforced soil mass, methods of construction and quality of materials are to be in accordance with Project Specification Paragraph 00596A .

2. Assumed Soil Characteristics:
   - Wall Backfill:
     - Unit Weight: 125 pcf
     - Internal Friction Angle: 34°
     - Cohesion = 0 psf
   - Retained Backfill:
     - Unit Weight: 135 pcf
     - Internal Friction Angle: 38°
     - Cohesion = 0 psf
   - Foundation Soils:
     - Unit Weight: 125 pcf
     - Internal Friction Angle: 38°
     - Cohesion = 0 psf
   - Traffic Surcharge Loading (LL) = 250 psf

   Worst Case Factored Bearing Load by MSE Wall- @ 8' Height - 1680 psf.

   If actual characteristics, grades or dimensions of soil materials differ from those listed above or shown on the plans, Hilfiker Retaining walls shall be notified to evaluate the need to redesign.

3. If during construction, the wall location, structure location or loads are different than that proposed in this plan set and calculation package, HRW shall be notified to evaluate the need for a redesign.

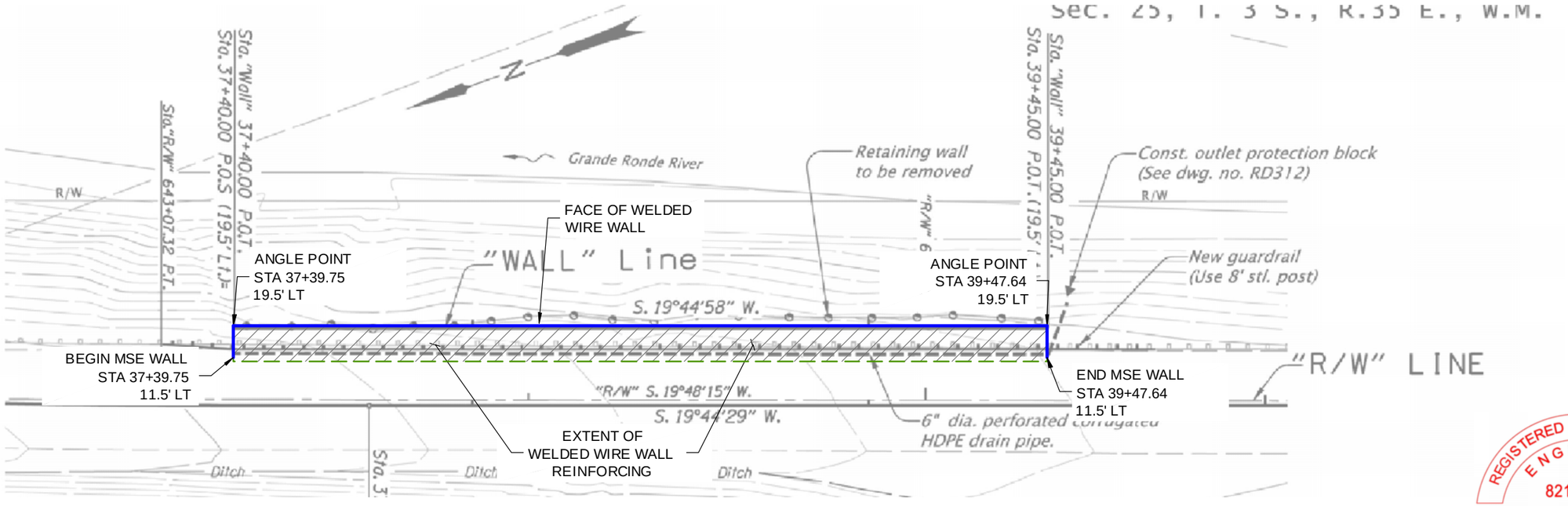
4. The design requires a non-saturated backfill. Surface and sub-surface drainage control may be required to prevent saturation of the backfill or relieve hydrostatic pressures.

5. Design Procedure:
   See Project Specifications 00596A.04 Design & Submittal Requirements.

6. All information hereon is derived from the reference drawings, and is subject to geometric and geotechnical confirmation. The applicable Hilfiker construction guide and specifications are an integral part of this submittal.

SUPPLIED QUANTITIES:

WELDED WIRE WALL : 1744 FT^2



PLAN VIEW

SCALE: 1" = 30'

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82111PE
OREGON
NOVEMBER 12, 2008
KIRK CESARETTI
EXPIRATION DATE: 12/31/21

HW 201002BG

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	04-2-21	KLC	Initial .pdf Release
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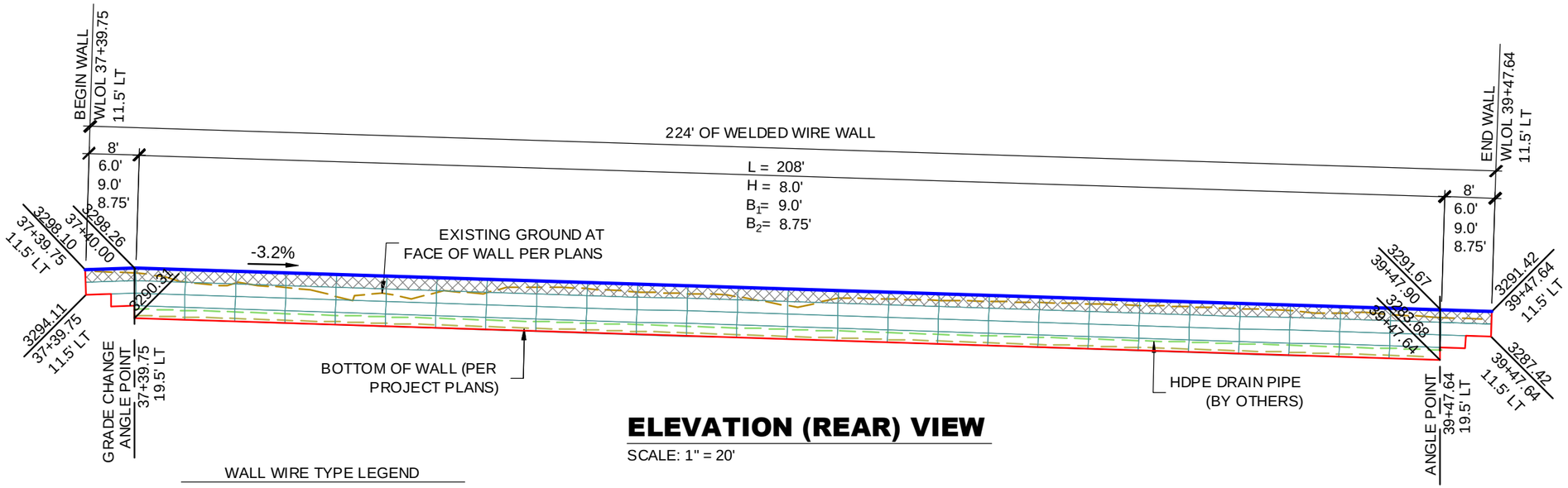
MSE WELDED WIRE WALL
PLAN VIEW & GENERAL NOTES

PROJECT	21-012
DATE	4-2-21
DESIGN	KLC
DRAWN	KLC

SHT 1 OF 4



ELEVATION (REAR) VIEW

SCALE: 1" = 20'

WALL WIRE TYPE LEGEND

FINISH: HOT DIP GALVANIZED
SERVICE LIFE: 75 YEARS

TYPE 1 - 8X12 W7.0x3.5 MATS
TYPE 2 - 8x21 W7.0x4.0 MATS

WELDED WIRE WALL PARAMETERS		
Height of Wall (H) ft	Length of Cap & Prongless Mats (B_1) ft	Base Length of Mats (B_2) ft
≤8'	9.0'	8.75'

Cap & Top Mats (B1) are: 8x12 W7.0x3.5 WWR (Type 1)
Standard Mats (B2) are: 8x21 W7.0x4.0 WWR (Type 2)

Finish: Hot Dip Galvanized - 75 Year Service Life

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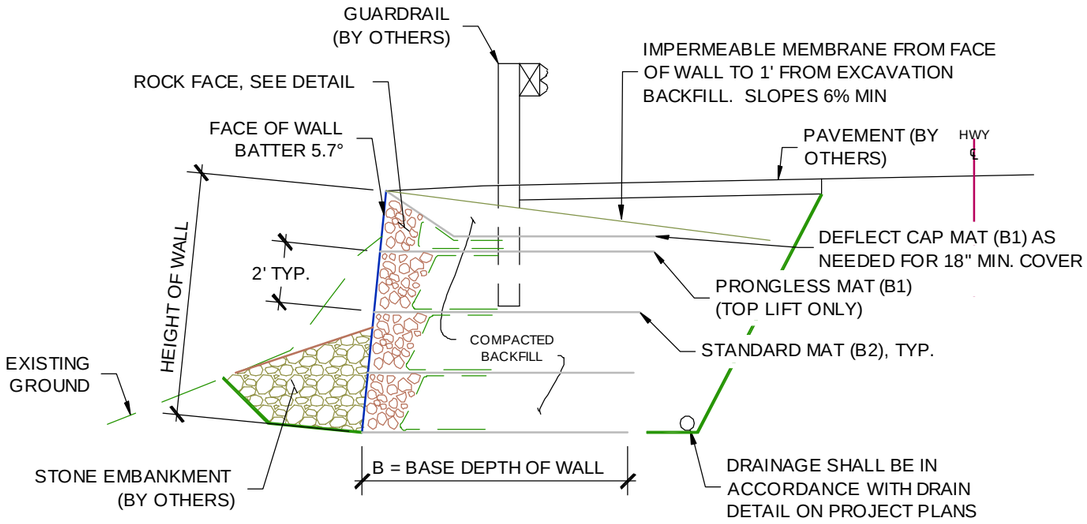
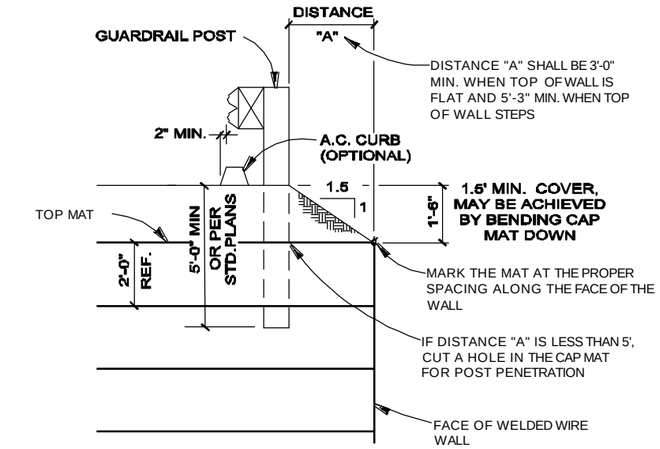
MSE WELDED WIRE WALL
ELEVATION VIEW

PROJECT 21-012
DATE 4-2-21
DESIGN KLC
DRAWN KLC
SHT 2 OF 4



CROSS SECTION, TYP

SCALE: 1" = 5'

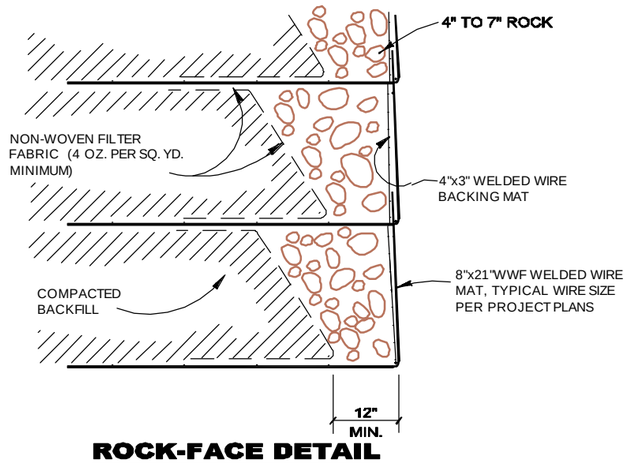


NOTE:
GUARDRAIL POST IS STEEL AND MAY BE PLACED IN THE FOLLOWING MANNER. THE POST MAY BE PRE-LOCATED WITH THE WALL SYSTEM CONSTRUCTED AROUND THE POSTS, SEE DETAIL BELOW.

SECTION

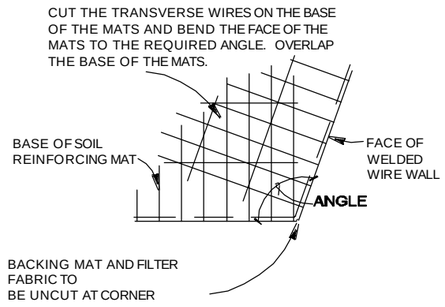
GUARDRAIL DETAIL

NOT TO SCALE
(FENCE DETAIL SIMILAR)



ROCK-FACE DETAIL

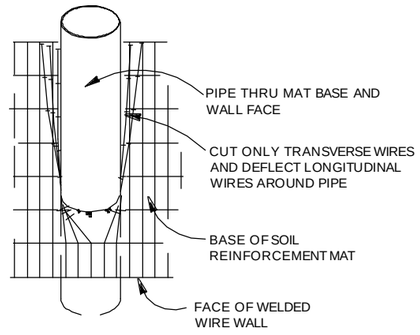
NOT TO SCALE



PLAN VIEW

OBTUSE CONVEX ANGLE

NOT TO SCALE



PLAN VIEW

PIPE OR SLEVE PENETRATION

NOT TO SCALE

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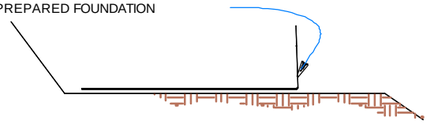
MSE WELDED WIRE WALL
CROSS SECTION & DETAILS

PROJECT	21-012
DATE	4-2-21
DESIGN	KLC
DRAWN	KLC

SHT 3 OF 4

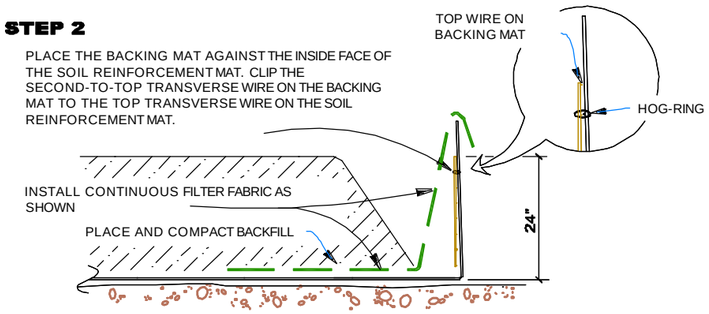
STEP 1

PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION



STEP 2

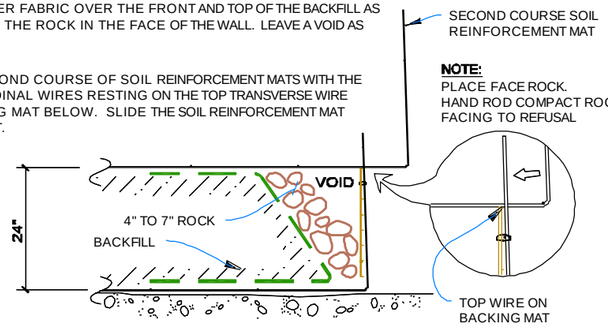
PLACE THE BACKING MAT AGAINST THE INSIDE FACE OF THE SOIL REINFORCEMENT MAT. CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP TRANSVERSE WIRE ON THE SOIL REINFORCEMENT MAT.



STEP 3

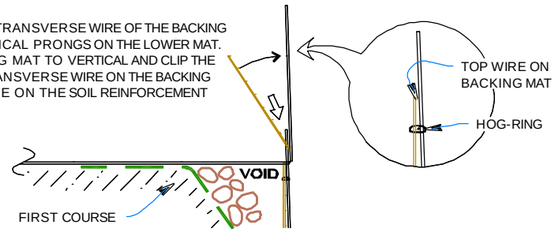
BRING THE FILTER FABRIC OVER THE FRONT AND TOP OF THE BACKFILL AS SHOWN. PLACE THE ROCK IN THE FACE OF THE WALL. LEAVE A VOID AS SHOWN.

PLACE THE SECOND COURSE OF SOIL REINFORCEMENT MATS WITH THE BASE LONGITUDINAL WIRES RESTING ON THE TOP TRANSVERSE WIRE OF THE BACKING MAT BELOW. SLIDE THE SOIL REINFORCEMENT MAT INTO ALIGNMENT.



STEP 4

HOOK THE BOTTOM TRANSVERSE WIRE OF THE BACKING MAT OVER THE VERTICAL PRONGS ON THE LOWER MAT. ROTATE THE BACKING MAT TO VERTICAL AND CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP WIRE ON THE SOIL REINFORCEMENT MAT.

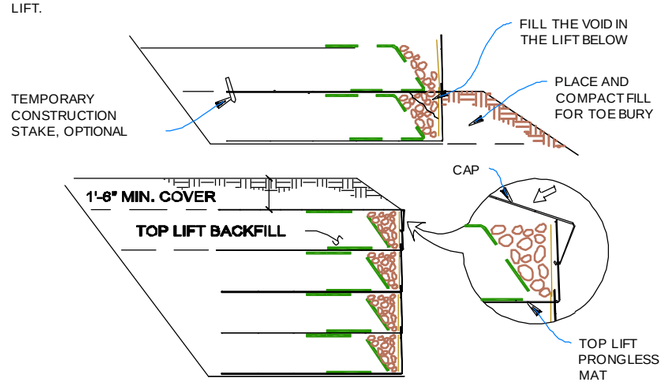


CONSTRUCTION SEQUENCE

NOT TO SCALE

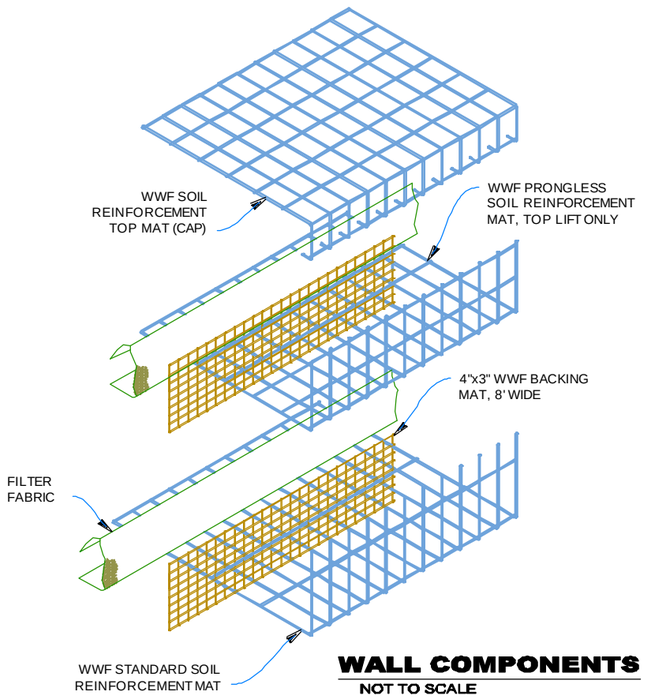
STEP 5

INSTALL THE FILTER FABRIC AS IN STEPS 2 AND 3. PLACE AND COMPACT THE BACKFILL AND ROCK TO THE BASE ELEVATION OF THE NEXT MAT. REPEAT STEPS 2 THROUGH 5 TO THE TOP LIFT.



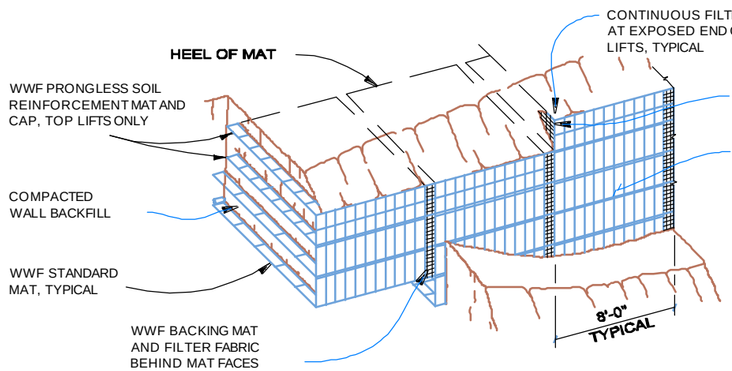
STEP 6: TOP LIFT

PLACE THE TOP LIFT PRONGLESS MAT, BACKING MAT AND FILTER FABRIC. PLACE AND COMPACT BACKFILL AND ROCK IN THE TOP LIFT. HOOK THE CAP OVER THE MIDDLE TRANSVERSE WIRE ON THE PRONGLESS MAT, AND ROTATE INTO PLACE. PLACE AND COMPACT COVER OVER TOP MAT TO 1'-6" MINIMUM DEPTH.



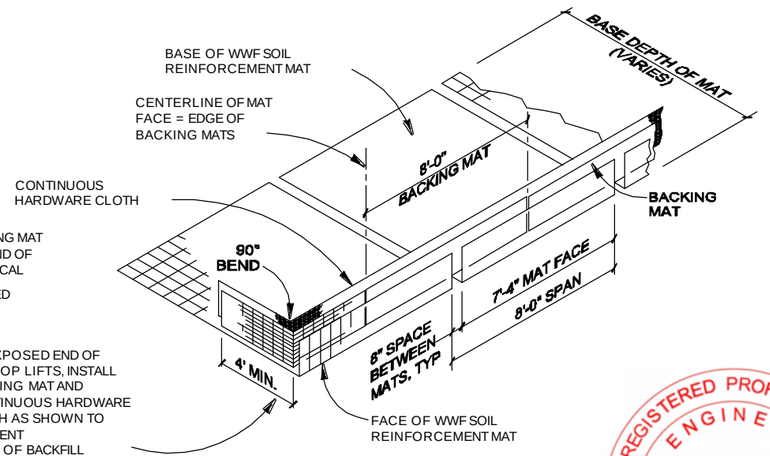
WALL COMPONENTS

NOT TO SCALE



PICTORIAL ELEVATION

NOT TO SCALE



ISOMETRIC VIEW

WELDED WIRE WALL COMPONENTS WITH RETURN MAT

NOT TO SCALE

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SHT 4 OF 4