

DESIGN NOTES

1.

Design is based on the assumption that backfill within the reinforced soil mass, methods of construction and quality of materials conform to the requirements of Hilfiker Retaining Walls.
2.

Assumed Soil Characteristics:
Wall Backfill:
Unit Weight: 130 pcf
Internal Friction Angle: 36°
Cohesion = 0 psf
Retained Backfill:
Unit Weight: 130 pcf
Internal Friction Angle: 34°
Cohesion = 0 psf
Foundation Soils:
Unit Weight: 130 pcf
Internal Friction Angle: 34°
Cohesion = 100 psf
Traffic Surcharge Loading (LL) = 250 psf
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:
Mechanically Stabilized Earth walls and Reinforced Soil Slopes, FHWA report No. FHWA-NHI-00-043.
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.
7.

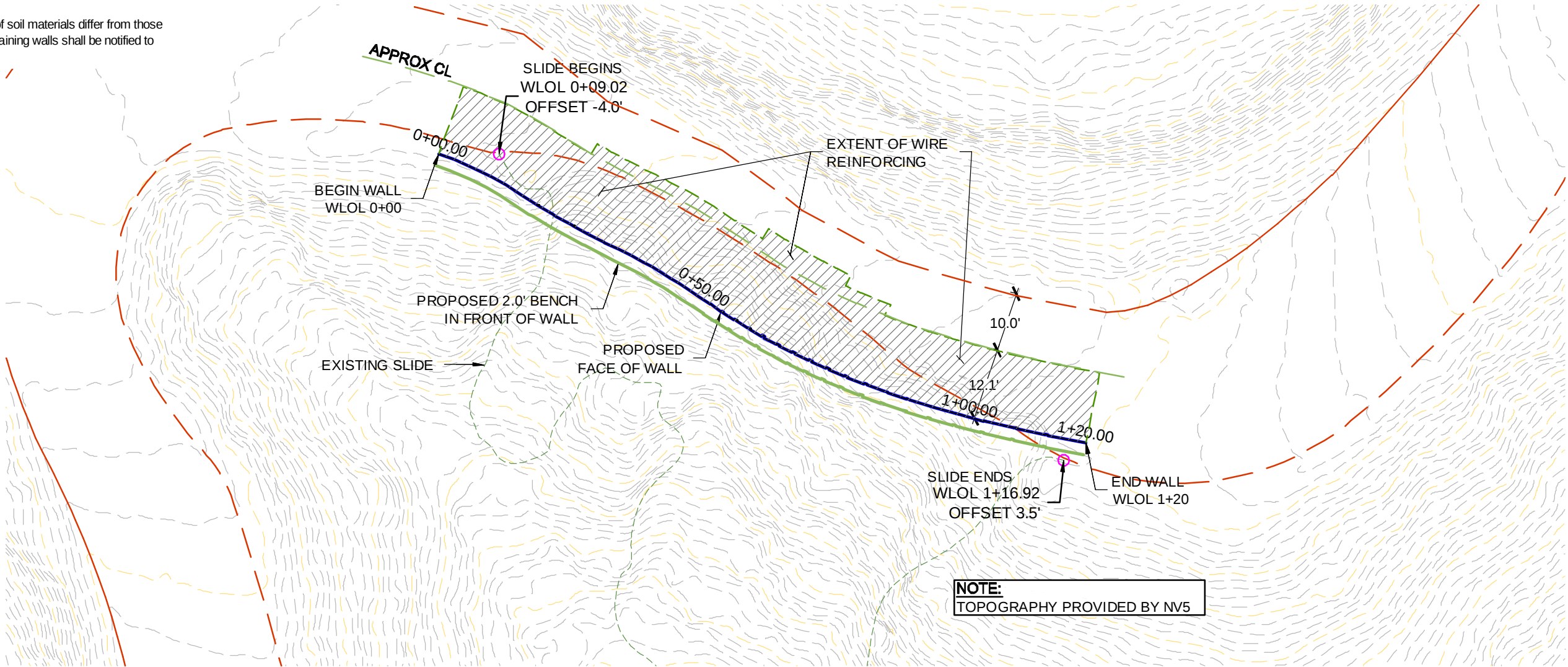
Hilfiker Retaining Walls shall be responsible only for the internal stability of the retaining wall, and not for global stability or foundation bearing capacity. The Owner shall be responsible for global stability and foundation competence. The Owner is responsible for all job site drainage, safety and fall protection provisions for workers in compliance with OSHA and any other applicable requirements.

Worst Case Applied Bearing Pressure by MSE Wall- @ 14' Height - 3475 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.

INSTALLED QUANTITIES:

WELDED WIRE WALL : 1024 FT²



PLAN VIEW

SCALE: 1" = 20'



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REV. NO.	DATE	BY	DESCRIPTION
	7-8-19	KLC	Initial .pdf Release
	7-13-19	KLC	Revised with 2' Bench

HILFIKER RETAINING WALLS



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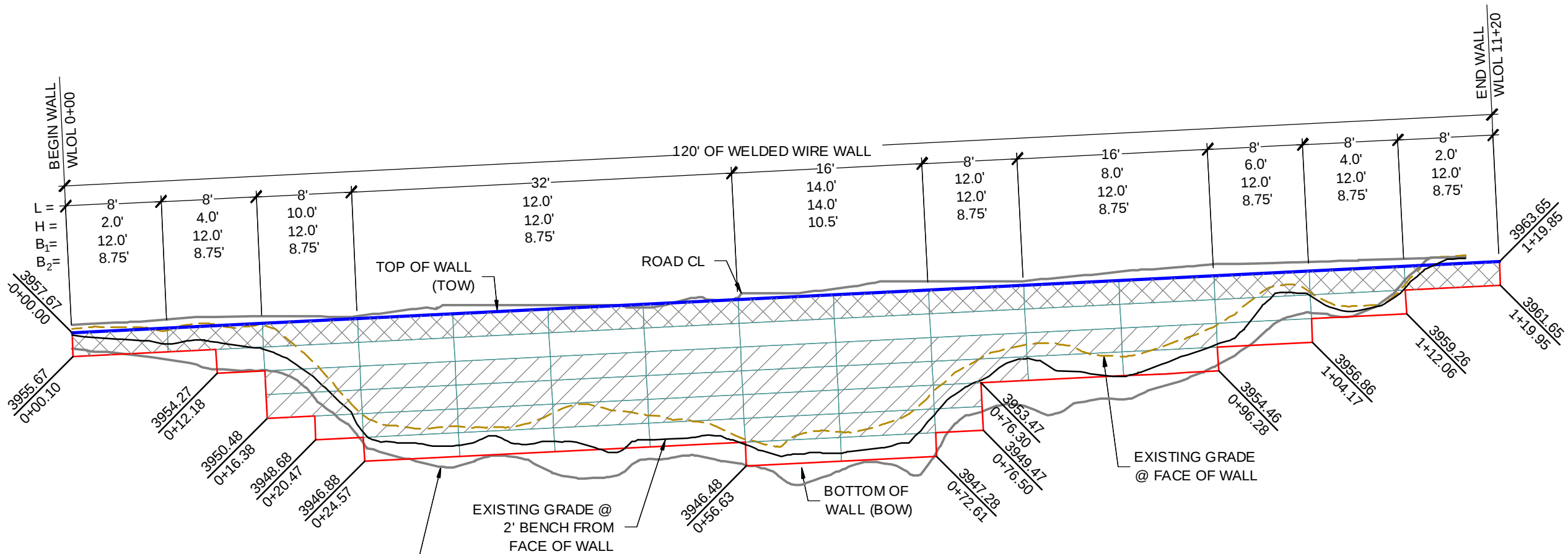
CA ERFO Santa Ysabel 46(1) Angel Mountain Road

MSE WELDED WIRE WALL
PLAN VIEW & GENERAL NOTES

HW 190523AW

PROJECT	19-045
DATE	7-8-19
DESIGN	KLC
DRAWN	KLC

SHT 1 OF 4



EXISTING GRADE @ 4' BENCH
FROM FACE OF WALL, SHOWN FOR
INFO ONLY

EXISTING GRADE @
2' BENCH FROM
FACE OF WALL

ELEVATION VIEW

SCALE: 1" = 10'

WALL WIRE TYPE LEGEND

FINISH: HOT DIP GALVANIZED
SERVICE LIFE: 75 YEARS

- TYPE 1 - 8X12 W4.5X3.5 MATS
- TYPE 2 - 8X21 W4.5X4.0 MATS
- TYPE 3 - 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
≤12'	12.0'	8.75'
14'	14.0'	10.5'
16'	16.0'	12.25'
Cap & Top Mats (B ₁) are: 8x12 W4.5x3.5 WWR (Type 1) Standard Mats (B ₂) are: 8x21 W4.5x4.0 WWR (Type 2) 8x21 W7.0x4.0 WWR (Type 3) Finish: Hot Dip Galvanized - 75 Year Service Life		

For Info Only

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	7-11-19	KLC	Included a 2' bench profile for comparison
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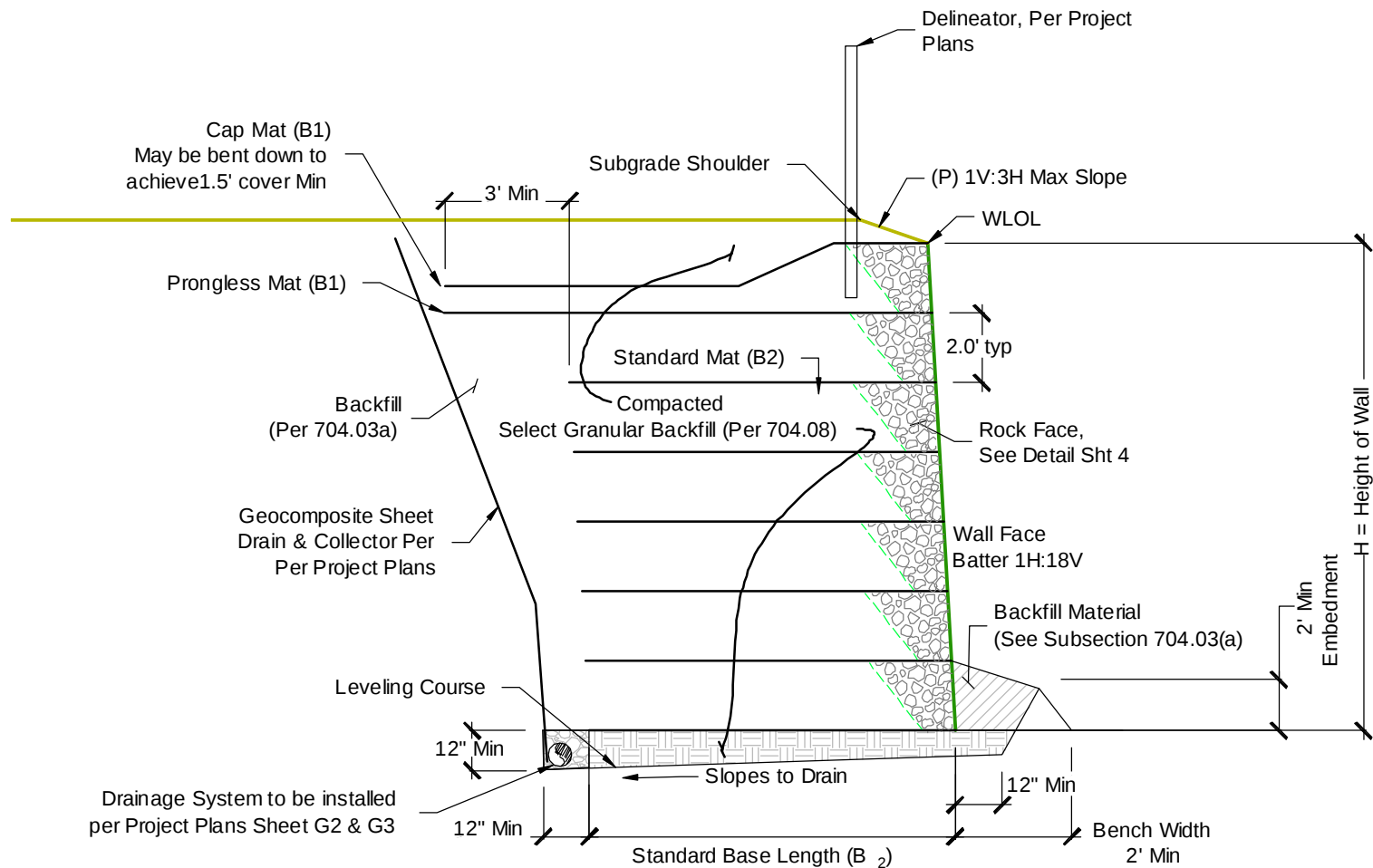
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MSE WELDED WIRE WALL
ELEVATION VIEW

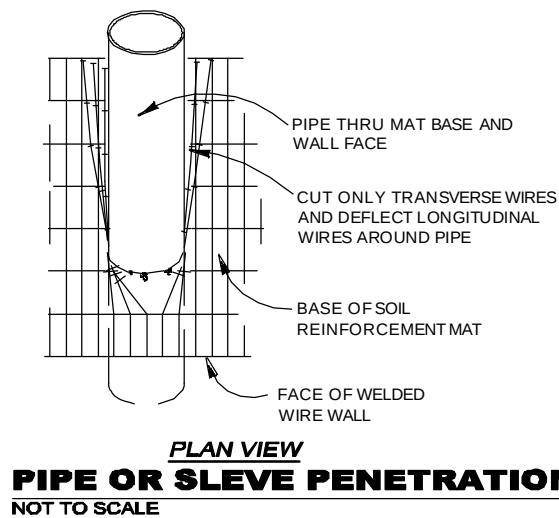
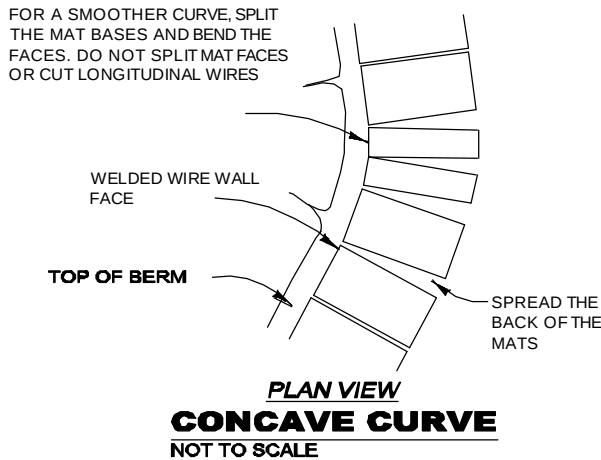
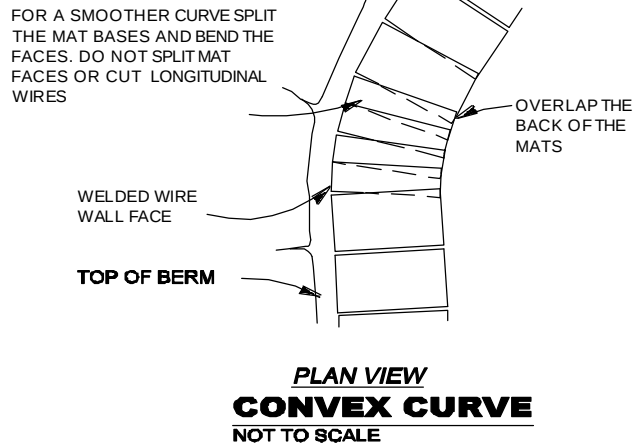
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SHT 2 OF 4



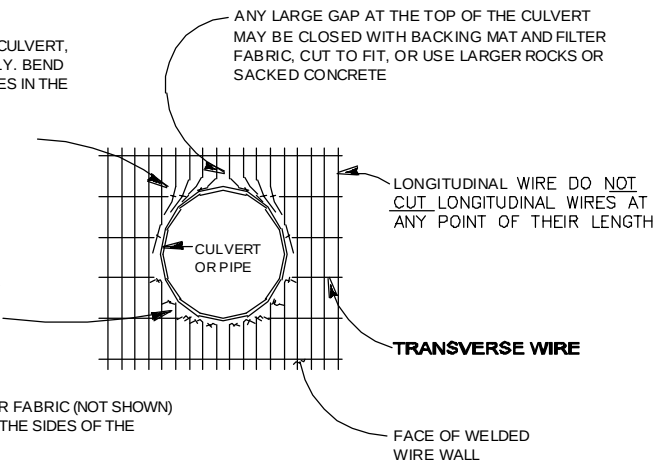
CROSS SECTION, TYP
SCALE: 1" = 5'



AT THE UPPER SURFACE OF THE CULVERT, CUT THE TRANSVERSE WIRES ONLY. BEND AND LIFT THE LONGITUDINAL WIRES IN THE BASE OF THE MAT TO FIT AGAINST THE SIDE OF THE CULVERT

AT THE LOWER SURFACE OF THE CULVERT, CUT THE TRANSVERSE WIRES ONLY IN THE MAT FACE. BEND THE LONGITUDINAL WIRES BACK TO FIT AGAINST THE CURVE OF THE CULVERT

NOTE: BACKING MATS AND FILTER FABRIC (NOT SHOWN) ARE TO BE CUT OFF FLUSH WITH THE SIDES OF THE CULVERT



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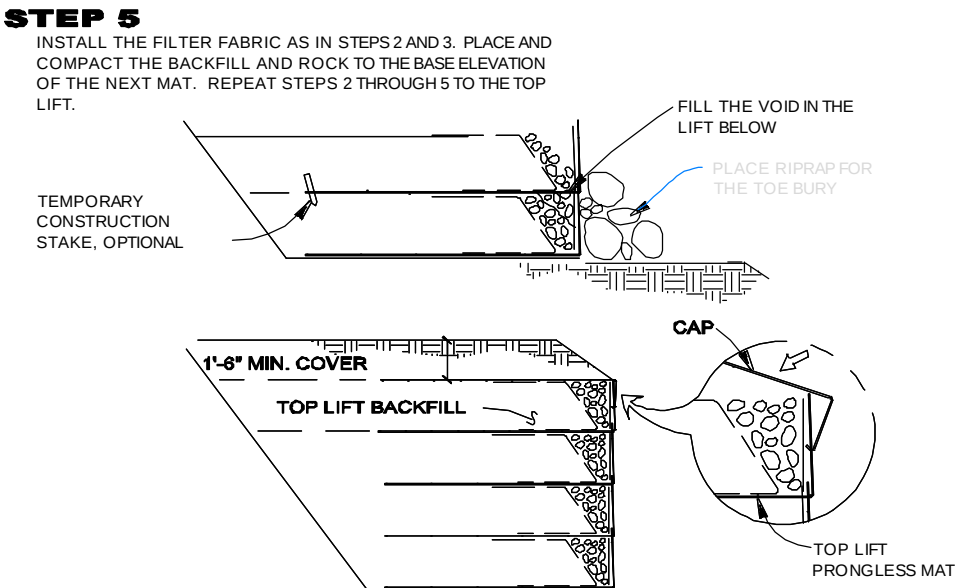
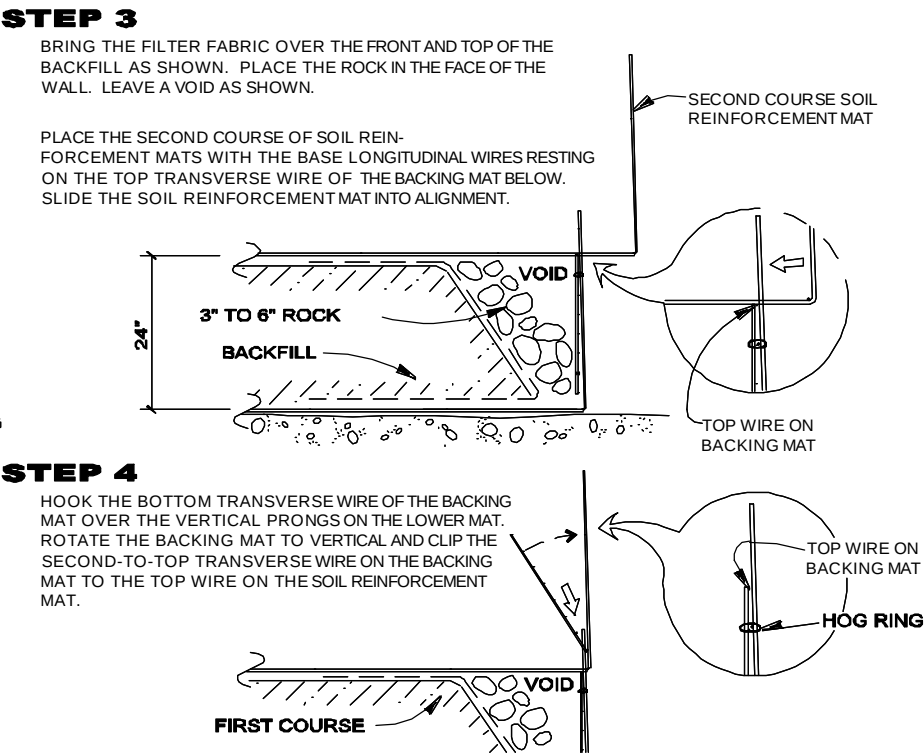
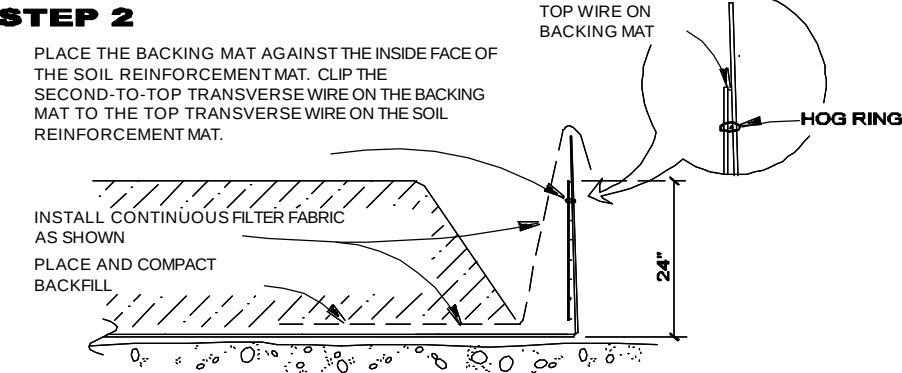
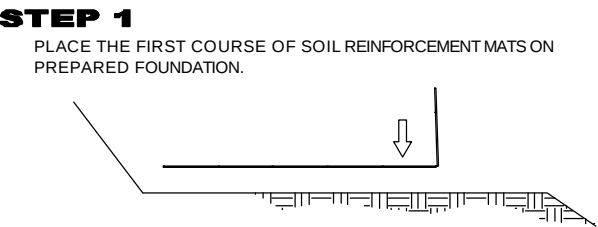
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**MSE WELDED WIRE WALL
CROSS SECTION & DETAILS**

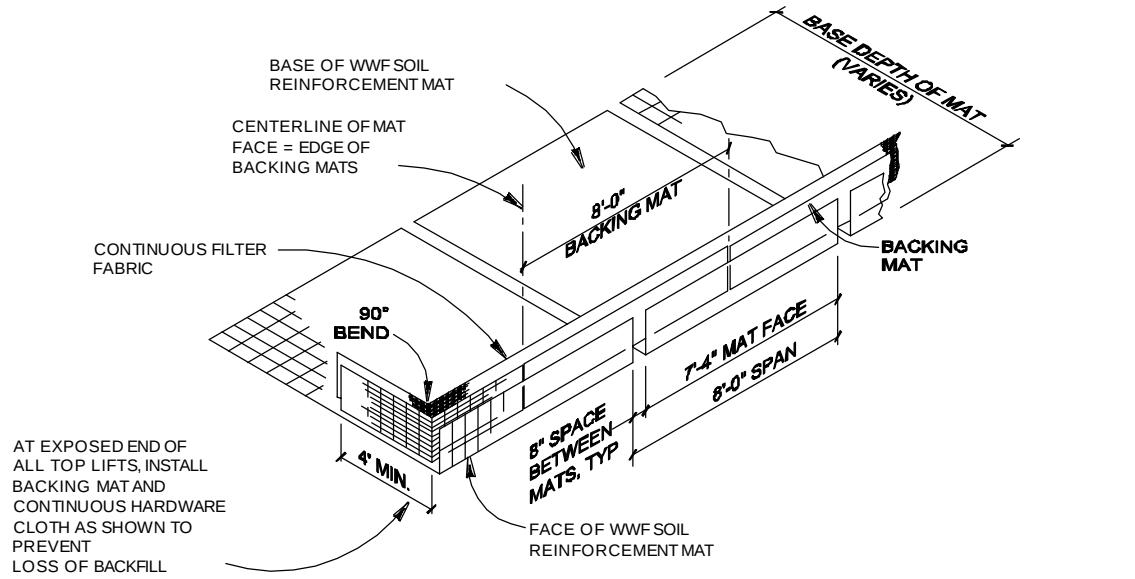
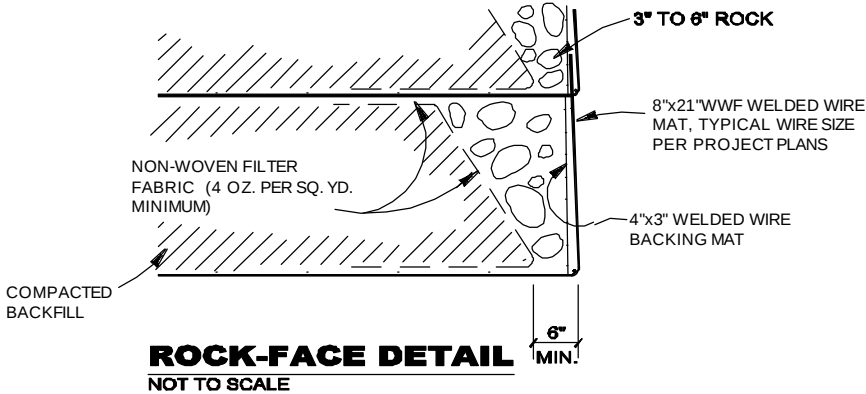
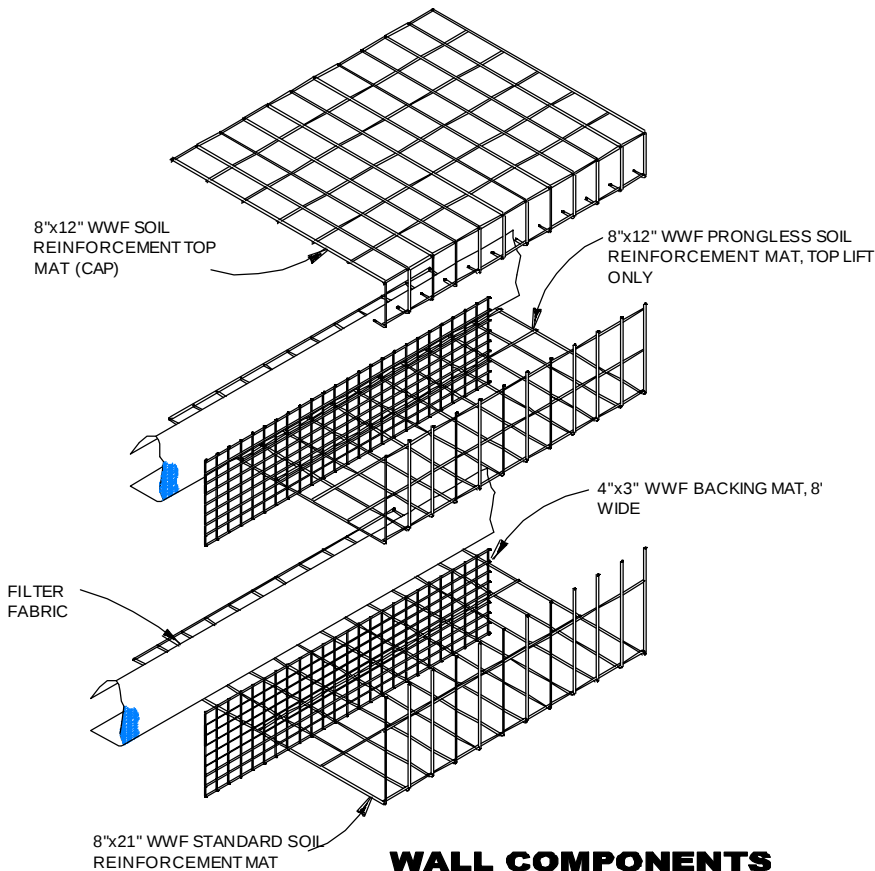
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SHT **3** OF 4



CONSTRUCTION SEQUENCE
NOT TO SCALE



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MSE WELDED WIRE WALL
PLAN VIEW & GENERAL NOTES

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DESIGN	KLC
DRAWN	KLC
SHT	4 OF 4