

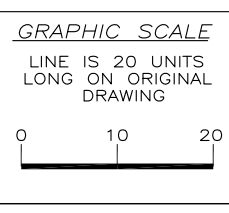
ESTIMATED QUANTITIES:
13,744 SQUARE FEET

SEE SHEET 3 FOR WELDED WIRE WALL MAT LENGTHS

220810AW ERFO NP YELL 2022-1(1)

THIS DRAWING IS FURNISHED SOLELY FOR THE USE OF OR IN CONNECTION WITH THIS PROJECT AND THE PROPRIETARY INFORMATION SHOWN HEREON IS NOT TO BE TRANSMITTED TO ANY OTHER ORGANIZATION WITHOUT SPECIFIC AUTHORIZATION BY THE HILFIKER COMPANY. HILFIKER RETAINING WALLS ARE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: 243,613; 243,697; 288,616; 4,117,686; 4,329,089; 4,324,508; 4,391,557; 4,505,821; 4,343,318; 4,661,023; 4,856,939; 4,929,125; 5,076,735; 5,647,695; 5,722,799; 5,733,072; 6,357,970B1; 6,874,975B2; 7,033,118B2; AND OTHERS. OTHER PATENTS PENDING (2008)

REV. NO.	DATE	BY	DESCRIPTION
1	18 AUG 22	AH	UPDATED ZONING & CHANGED TO ROCK FACE



PROJ. MGR. HKH
DRAWN BY AH
REVIEWED BY DH

HILFIKER RETAINING WALLS

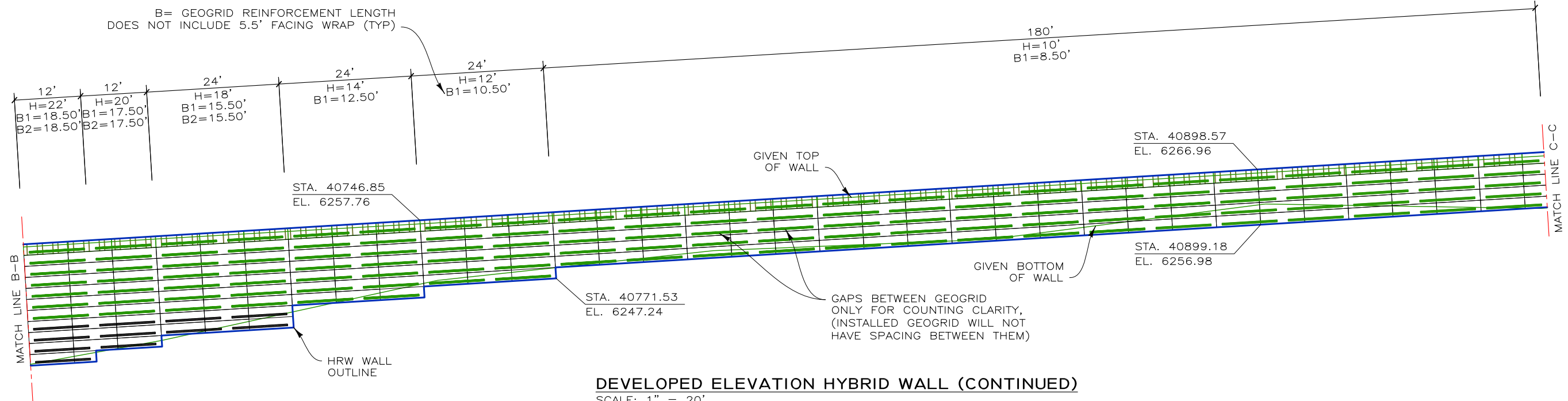
1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE 800.762.8962
PH 707.443.5093 FAX 707.443.2891
WEBSITE www.hilfiker.com E-MAIL info@hilfiker.com

SINCE 1902
QUALITY PRODUCTS

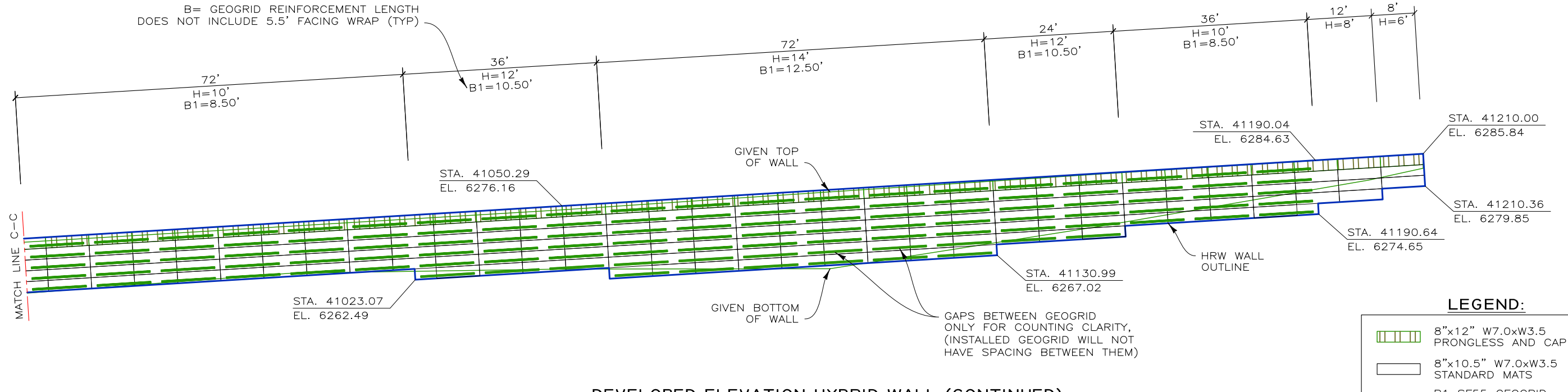
DWG DATE 12 AUG 22
REVISION DATE 18 AUG 22
SCALE NOTED

FOR BIDDING PURPOSES ONLY
WELDED WIRE WALL WITH GEOGRID REINFORCEMENT
ERFO NP YELL 2022-1(I)
NORTHWEST LININGS
GARDINER, MONTANA
ELEVATION VIEW

PROJECT NO. 220810AW
SHEET 1 OF 4



DEVELOPED ELEVATION HYBRID WALL (CONTINUED)
SCALE: 1" = 20'



DEVELOPED ELEVATION HYBRID WALL (CONTINUED)
SCALE: 1" = 20'

LEGEND:

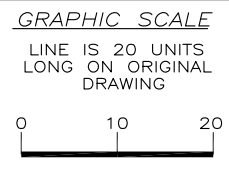
	8"x12" W7.0xW3.5 PRONGLESS AND CAP MATS
	8"x10.5" W7.0xW3.5 STANDARD MATS
	B1 SF55 GEOGRID (BY OTHERS)
	B2 SF80 GEOGRID (BY OTHERS)

SEE SHEET 3 FOR WELDED WIRE WALL MAT LENGTHS

220810AW ERFO NP YELL 2022-1(1)

THIS DRAWING IS FURNISHED SOLELY FOR THE USE OF OR IN CONNECTION WITH THIS PROJECT AND THE PROPRIETARY INFORMATION SHOWN HEREON IS NOT TO BE TRANSMITTED TO ANY OTHER ORGANIZATION WITHOUT SPECIFIC AUTHORIZATION BY THE HILFIKER COMPANY. HILFIKER RETAINING WALLS ARE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: 243,613; 243,697; 288,616; 4,117,686; 4,329,089; 4,324,508; 4,391,557; 4,505,821; 4,343,318; 4,661,023; 4,856,939; 4,929,125; 5,076,735; 5,647,695; 5,722,799; 5,733,072; 6,357,970B1; 6,874,975B2; 7,033,118B2; AND OTHERS. OTHER PATENTS PENDING (2008)

REV. NO.	DATE	BY	DESCRIPTION
1	18 AUG 22	AH	UPDATED ZONING & CHANGED TO ROCK FACE



PROJ. MGR. HKH
DRAWN BY AH
REVIEWED BY DH

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE 800.762.8962
PH 707.443.5093 FAX 707.443.2891
WEBSITE www.hilfiker.com E-MAIL Info@hilfiker.com

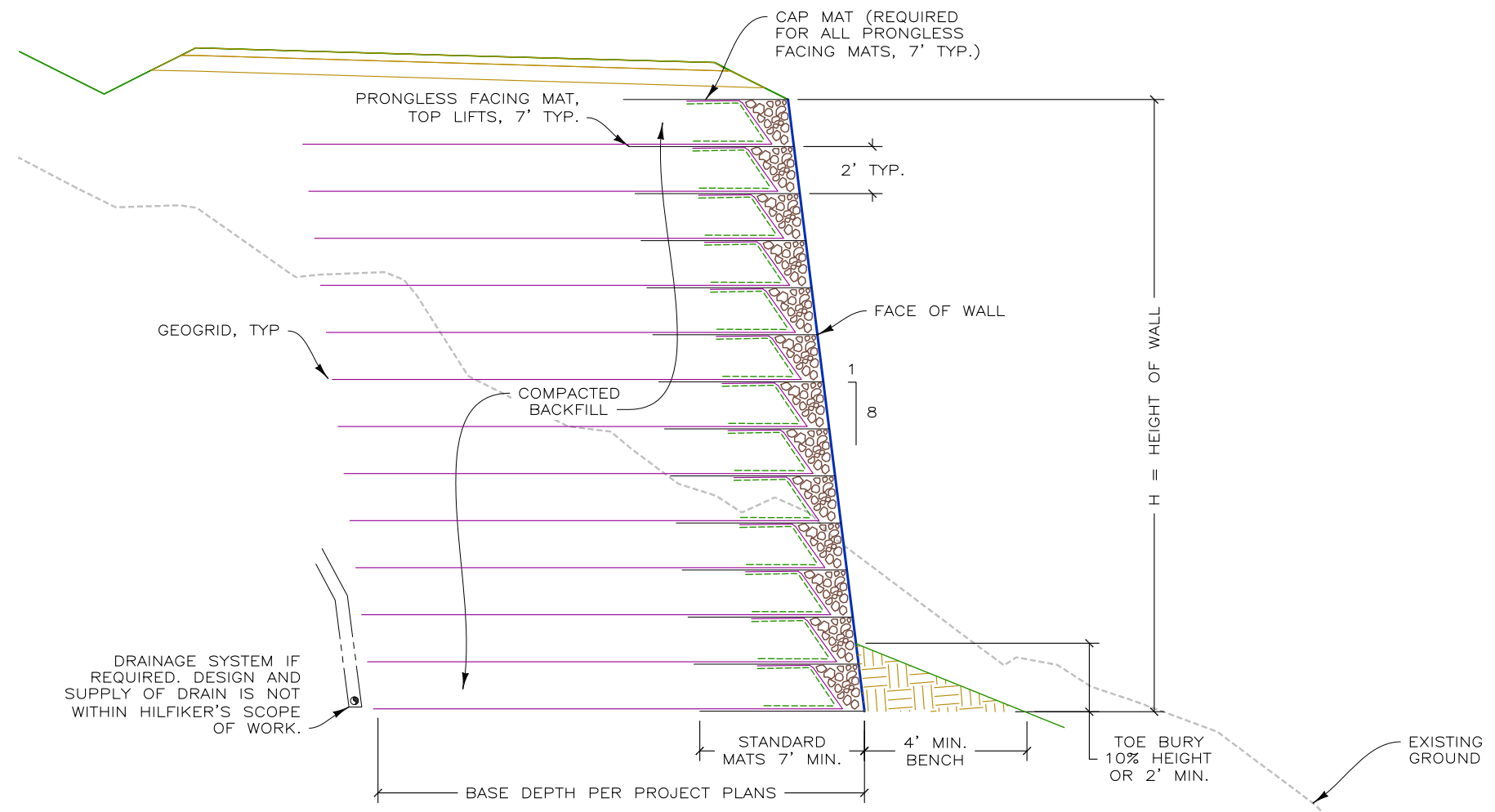
SINCE 1902 QUALITY PRODUCTS

DWG DATE 12 AUG 22
REVISION DATE 18 AUG 22
SCALE NOTED

FOR BIDDING PURPOSES ONLY
WELDED WIRE WALL WITH GEOGRID REINFORCEMENT
ERFO NP YELL 2022-1(I)
NORTHWEST LININGS
GARDINER, MONTANA
ELEVATION VIEW (CONTINUED)

PROJECT NO. 220810AW
SHEET 2 OF 4

220810AW | ERFO NP YELL 2022-1(1)



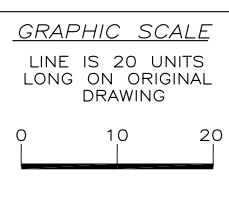
PROJECT-SPECIFIC NOTES:

1. REFERENCE DRAWINGS: BASED OFF DRAWINGS FROM FHWA, OFFICE OF FEDERAL LANDS HIGHWAY, SHEETS 1-23 USED, DATED 10 AUGUST 2022.
2. BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION.

TYPICAL SECTION - HYBRID WALL
SCALE: 3" = 20'

THIS DRAWING IS FURNISHED SOLELY FOR THE USE OF OR IN CONNECTION WITH THIS PROJECT AND THE PROPRIETARY INFORMATION SHOWN HEREON IS NOT TO BE TRANSMITTED TO ANY OTHER ORGANIZATION WITHOUT SPECIFIC AUTHORIZATION BY THE HILFIKER COMPANY. HILFIKER RETAINING WALLS ARE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: 243,613; 243,697; 288,616; 4,117,686; 4,329,089; 4,324,508; 4,391,557; 4,505,821; 4,343,318; 4,661,023; 4,856,939; 4,929,125; 5,076,735; 5,647,695; 5,722,799; 5,733,072; 6,357,970B1; 6,874,975B2; 7,033,118B2; AND OTHERS. OTHER PATENTS PENDING (2008)

REV.NO.	DATE	BY	DESCRIPTION
1	18 AUG 22	AH	UPDATED ZONING & CHANGED TO ROCK FACE



PROJ. MGR.
HKH
DRAWN BY
AH
REVIEWED BY
DH

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE 800.762.8962
PH 707.443.5093 FAX 707.443.2891
WEBSITE www.hilfiker.com E-MAIL info@hilfiker.com

DWG DATE	12 AUG 22
REVISION DATE	18 AUG 22
SCALE	NOTED

FOR BIDDING PURPOSES ONLY
WELDED WIRE WALL WITH GEOGRID REINFORCEMENT
ERFO NP YELL 2022-1(I)
NORTHWEST LININGS
GARDINER, MONTANA
TYPICAL SECTION & NOTES

PROJECT NO.
220810AW
SHEET
3
OF 4

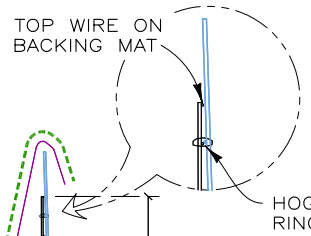
STEP 1
PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION.



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.

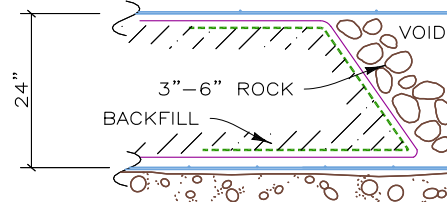
PLACE CONTINUOUS GEOGRID AND FILTER FABRIC AS SHOWN.

PLACE AND COMPACT BACKFILL LEAVING VOID IN FACE PER PROJECT PLANS



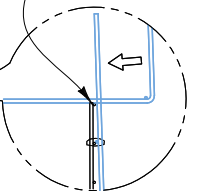
24"

STEP 3
BRING THE GEOGRID AND FILTER FABRIC OVER THE FRONT AND TOP OF THE BACKFILL AS SHOWN. PLACE SPECIAL FILLING IN THE FACE OF THE WALL PER PROJECT PLANS. LEAVE A VOID AS SHOWN.



SECOND COURSE SOIL REINFORCEMENT MAT

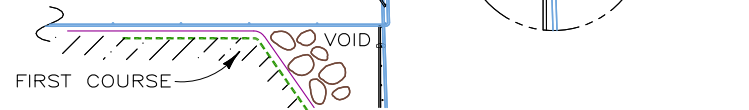
TOP WIRE ON BACKING MAT



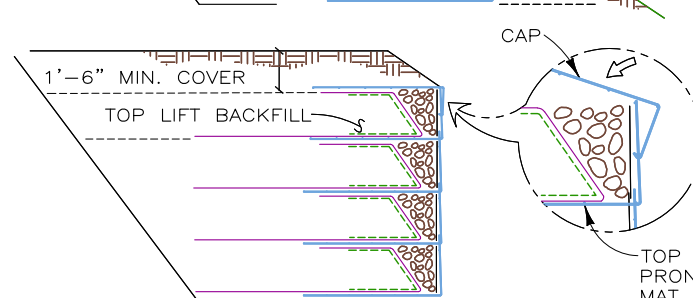
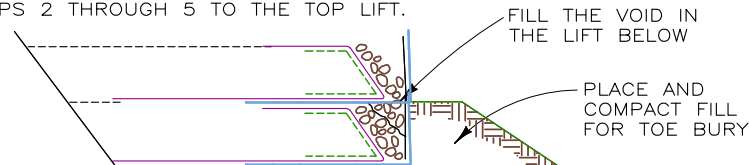
CONSTRUCTION SEQUENCE

NOT TO SCALE

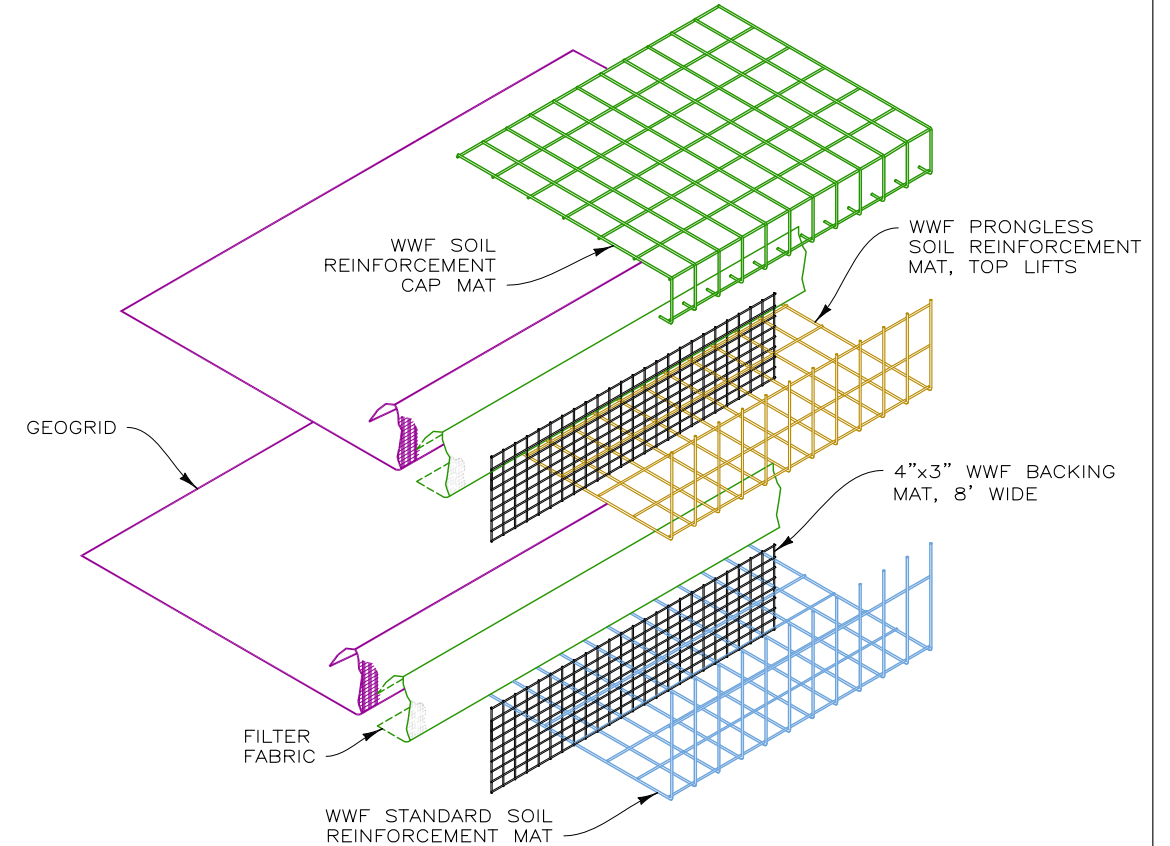
STEP 4
HOOK THE BOTTOM TRANSVERSE WIRE OF THE BACKING MAT OVER THE VERTICAL PRONGS ON THE LOWER MAT. ROTATE THE BACKING MAT TO VERTICAL AND CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP WIRE ON THE SOIL REINFORCEMENT MAT.



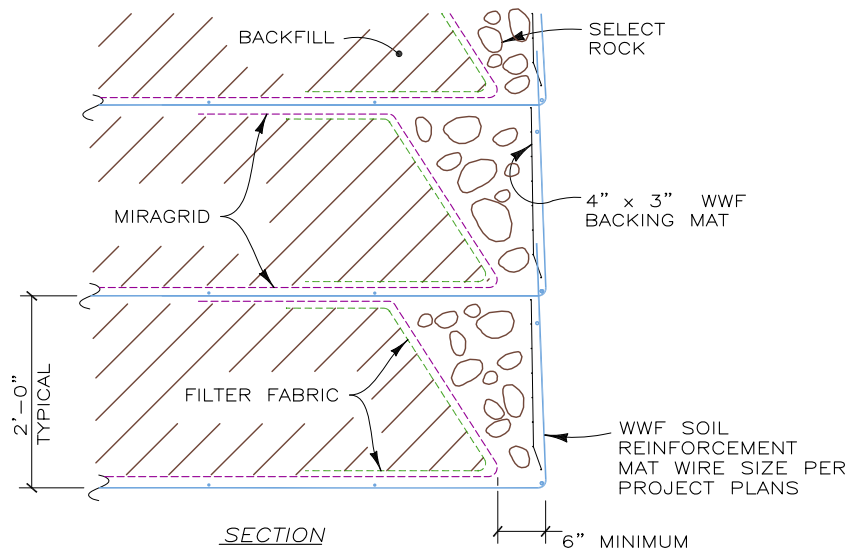
STEP 5
INSTALL GEOGRID AND FILTER FABRIC AS IN STEPS 1 AND 2. PLACE AND COMPACT THE BACKFILL AND ROCK TO THE BASE ELEVATION OF THE NEXT MAT. REPEAT STEPS 2 THROUGH 5 TO THE TOP LIFT.



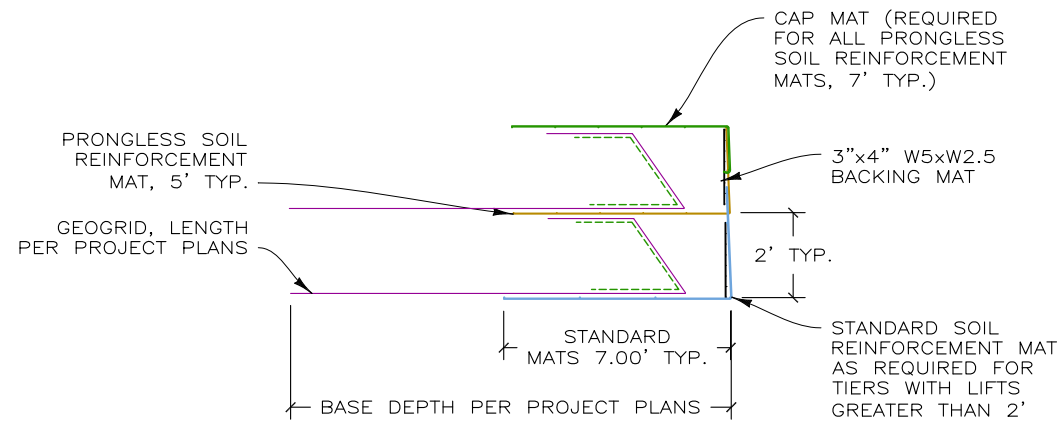
STEP 6: TOP LIFT
PLACE THE TOP LIFT PRONGLESS MAT, GEOGRID AND BACKING MAT. PLACE AND COMPACT BACKFILL AND ROCK OR SOIL IN THE TOP LIFT. HOOK THE CAP OVER THE MIDDLE TRANSVERSE WIRE ON THE PRONGLESS MAT, AND ROTATE INTO PLACE. PLACE AND COMPACT COVER OVER TOP MAT TO 1'-6" MINIMUM DEPTH.



WALL COMPONENTS
NOT TO SCALE



SECTION WALL FACE DETAIL
NOT TO SCALE



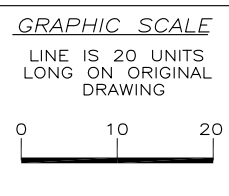
WIRE FACED MIRAGRID WALL DETAILS
NOT TO SCALE

WWF= WELDED WIRE FABRIC

220810AW ERFO NP YELL 2022-1(1)

THIS DRAWING IS FURNISHED SOLELY FOR THE USE OF OR IN CONNECTION WITH THIS PROJECT AND THE PROPRIETARY INFORMATION SHOWN HEREON IS NOT TO BE TRANSMITTED TO ANY OTHER ORGANIZATION WITHOUT SPECIFIC AUTHORIZATION BY THE HILFIKER COMPANY. HILFIKER RETAINING WALLS ARE PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS: 243,613; 243,697; 288,616; 4,117,686; 4,329,089; 4,324,508; 4,391,557; 4,505,621; 4,343,318; 4,661,023; 4,856,939; 4,929,125; 5,076,735; 5,647,695; 5,722,799; 5,733,072; 6,357,970B1; 6,874,975B2; 7,033,118B2; AND OTHERS. OTHER PATENTS PENDING (2008)

REV.NO.	DATE	BY	DESCRIPTION
1	18 AUG 22	AH	UPDATED ZONING & CHANGED TO ROCK FACE



PROJ. MGR. HKH
DRAWN BY AH
REVIEWED BY DH

HILFIKER RETAINING WALLS

1902 Hilfiker Lane
Eureka, CA 95503-5711
TOLL-FREE 800.762.8962
PH 707.443.5093 FAX 707.443.2891
WEBSITE www.hilfiker.com E-MAIL info@hilfiker.com

DWG DATE 12 AUG 22
REVISION DATE 18 AUG 22
SCALE NOTED

FOR BIDDING PURPOSES ONLY
WELDED WIRE WALL WITH GEOGRID REINFORCEMENT
ERFO NP YELL 2022-1(I)
NORTHWEST LININGS
GARDINER, MONTANA
CONSTRUCTION SEQUENCE & DETAILS

PROJECT NO. 220810AW
SHEET 4 OF 4