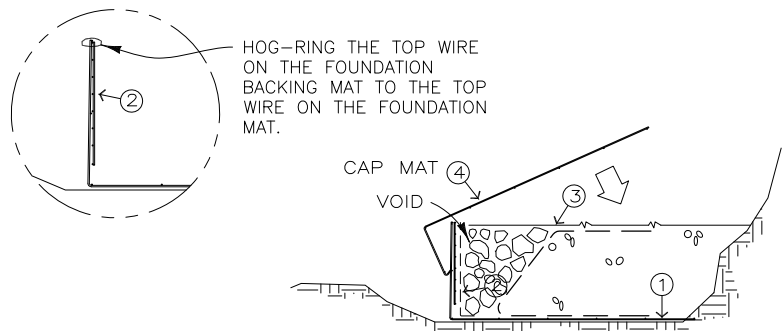
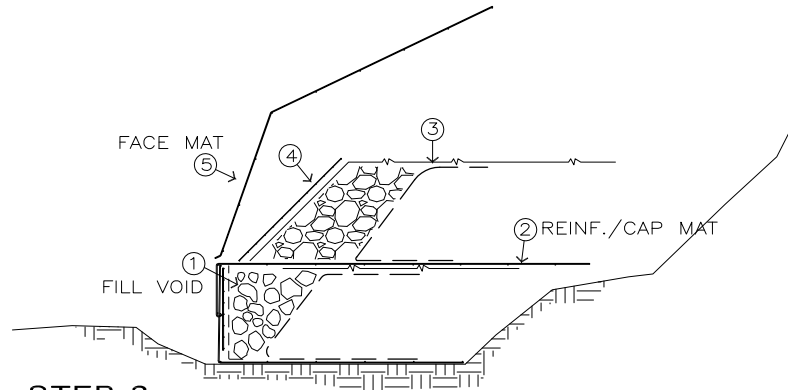


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STANDARDS\WWW\STANDARD LOCK-FACE



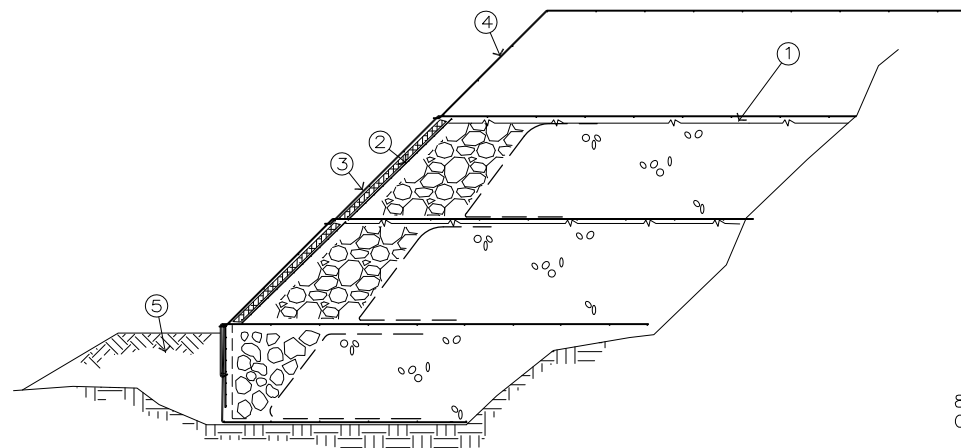
STEP 1

1. PREPARE THE FOUNDATION AND PLACE THE FOUNDATION MAT.
2. INSTALL THE FOUNDATION BACKING MAT.
3. PLACE AND COMPACT BACKFILL TO 24" DEPTH AS SHOWN.
4. HOOK CAP MAT ON TRANSVERSE WIRE OF FOUNDATION MAT AND LAY IT DOWN ONTO THE BACKFILL.



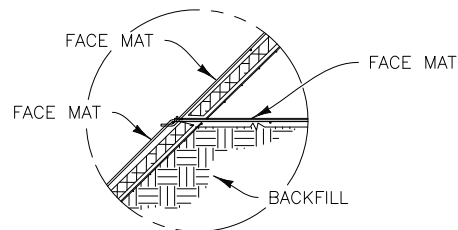
STEP 2

1. FILL THE VOID BELOW THE FRONT OF THE CAP AND ROD TO FULLY COMPACT.
2. PLACE FIRST REINF./FACE MAT ON FOUNDATION CAP MAT.
3. PLACE BACKFILL AND COMPACT TO VARIABLE DEPTH.
4. PLACE BACKING MAT.
5. HOOK FACE MAT ON TRANSVERSE WIRES OF REINF./FACE MAT AND THE FOUNDATION MAT AND LAY IT DOWN ONTO THE BACKFILL.



STEP 3

1. PLACE AND COMPACT SECOND VARIABLE LIFT HEIGHT OF BACKFILL.
2. PLACE BACKING MAT.
3. ROTATE AND INSTALL FACE MAT AS IN STEP 4 BELOW.
4. PLACE REINFORCING MAT WITH TRANSVERSE WIRE ALIGNED WITH THE TRANSVERSE WIRE OF THE LOWER FACE MAT THAT WILL BE HOOKED WITH THE NEXT FACE MAT.
5. BACKFILL AND COMPACT SOIL AT TOE OF WALL.

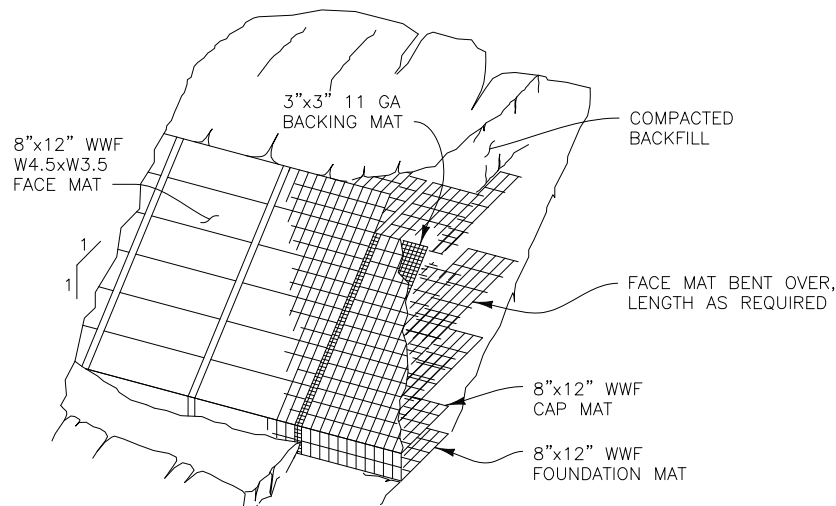


STEP 4

1. PLACE THE NEXT LIFT OF BACKFILL AND BACKING MAT.
2. INSTALL THE FACE MAT SO IT ENGAGES BOTH THE REINFORCING MAT AND THE LOWER FACE MAT.
3. CONTINUE LIFTS TO THE TOP OF THE WALL.
4. AFTER PLACING THE TOP LIFT OF BACKFILL AND FACE MAT AND BACKING MAT, PLACE THE REINFORCING MAT AND HOOK IT TO THE FACE MAT WITH HOG RINGS. BACKFILL AND COMPACT THE REQUIRED COVER OVER THE REINF./FACE MAT.

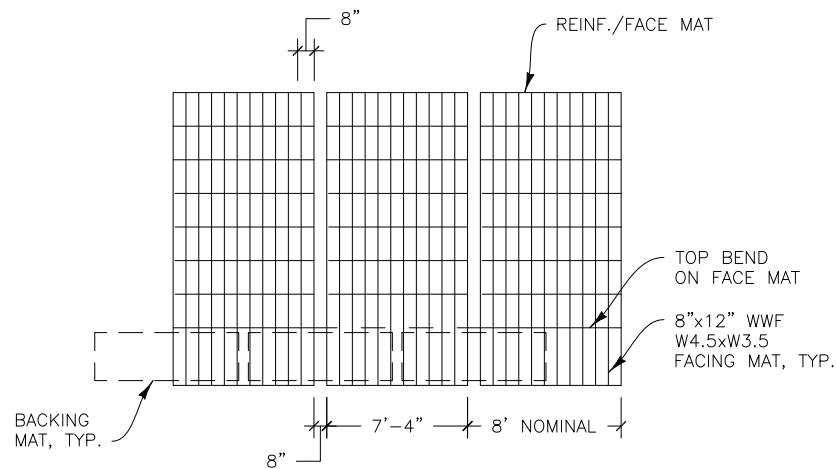
CONSTRUCTION SEQUENCE

NOT TO SCALE



PICTORIAL ELEVATION

NOT TO SCALE



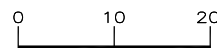
PLAN VIEW

ASSEMBLED FULL COVERAGE MATS

NOT TO SCALE

GRAPHIC SCALE

LINE IS 20 UNITS LONG ON ORIGINAL DRAWING



PROJ.MGR.

ENGINEER

CADD BY

HRW

HILFIKER RETAINING WALLS



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DWG DATE

7/17/19

REVISION DATE

SCALE

NOTED

ENGINEERED FOR CONSTRUCTION

WELDED WIRE WALL

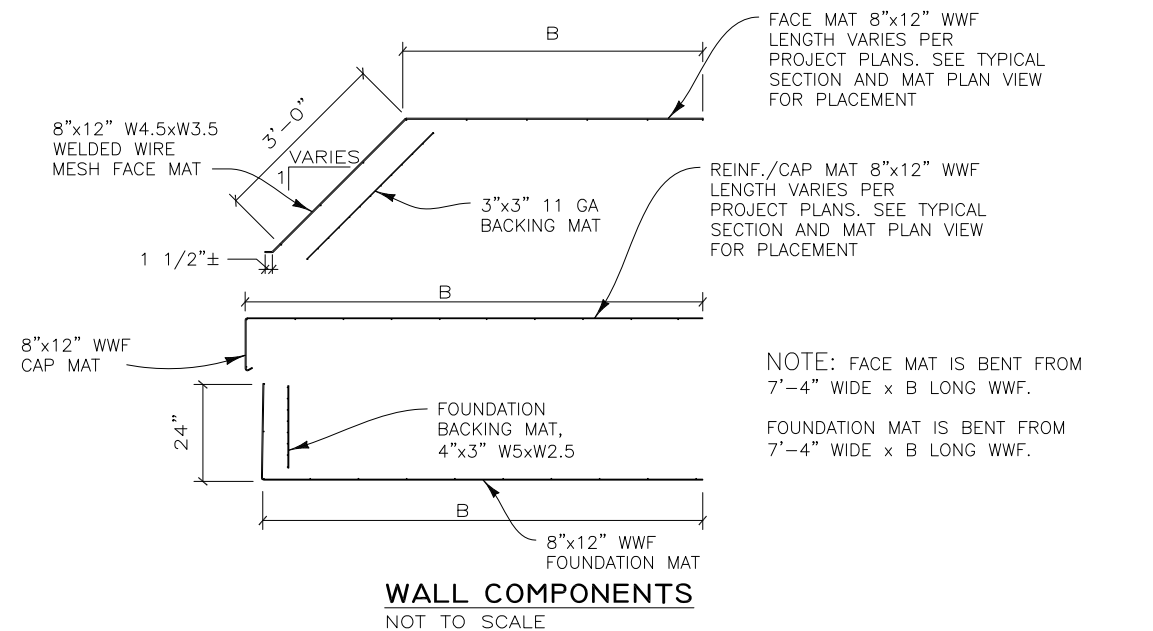
CLE ELUM DAM FISH PASSAGE
U.S. DEPT. OF THE INTERIOR, BUREAU OF RECLAMATION
RANCHO CORDOVA, CALIFORNIA

STEEPENED SLOPE DETAILS

PROJECT NO.
180614BW

SHEET
1

OF 4

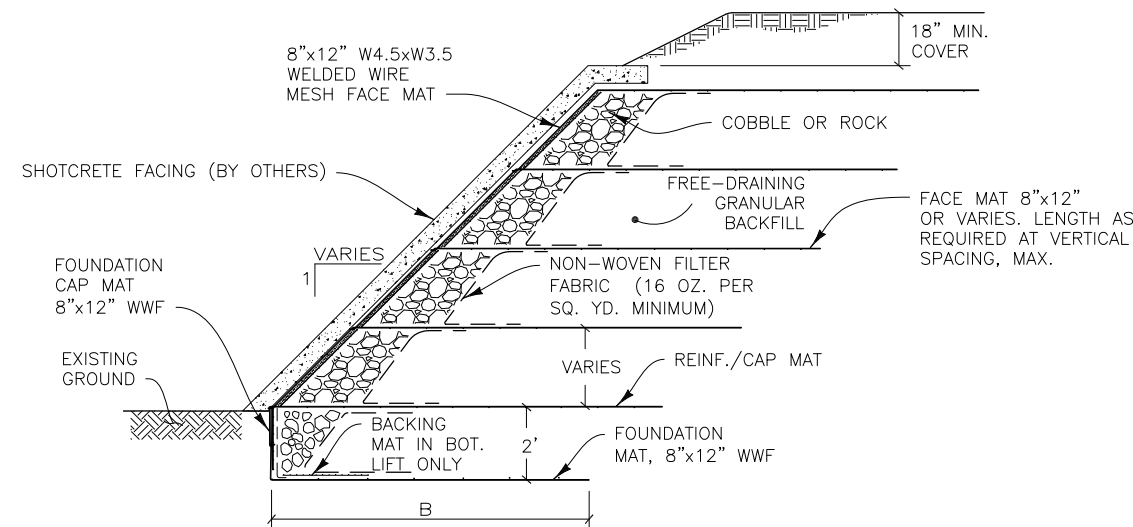


WALL COMPONENTS

NOT TO SCALE

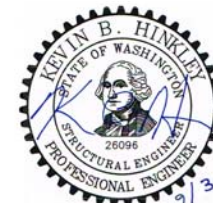
NOTES:

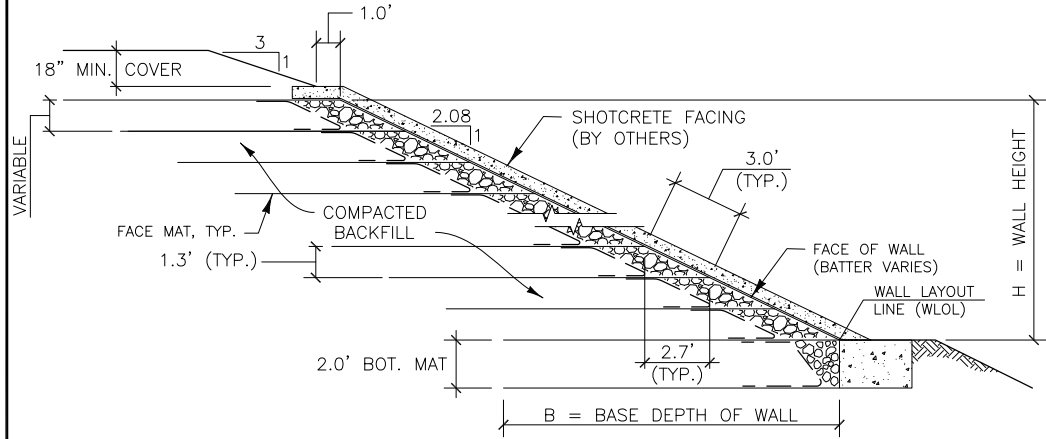
1. WWF = WELDED WIRE FABRIC



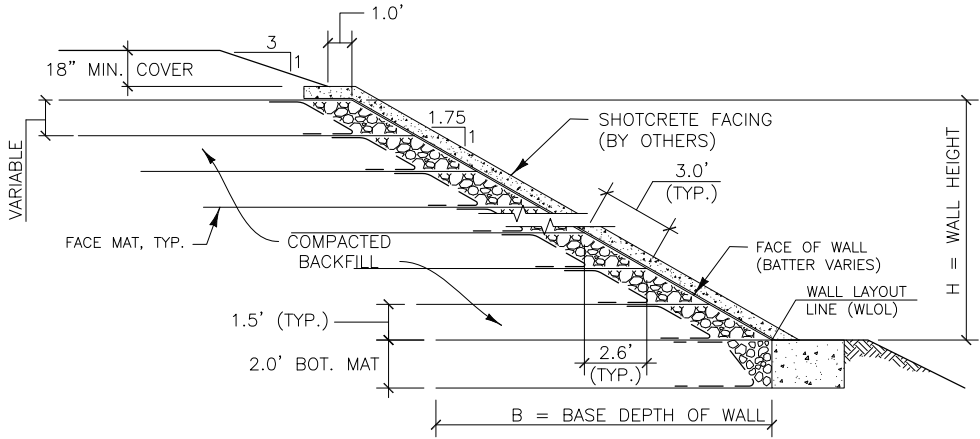
TYPICAL SECTION

NOT TO SCALE

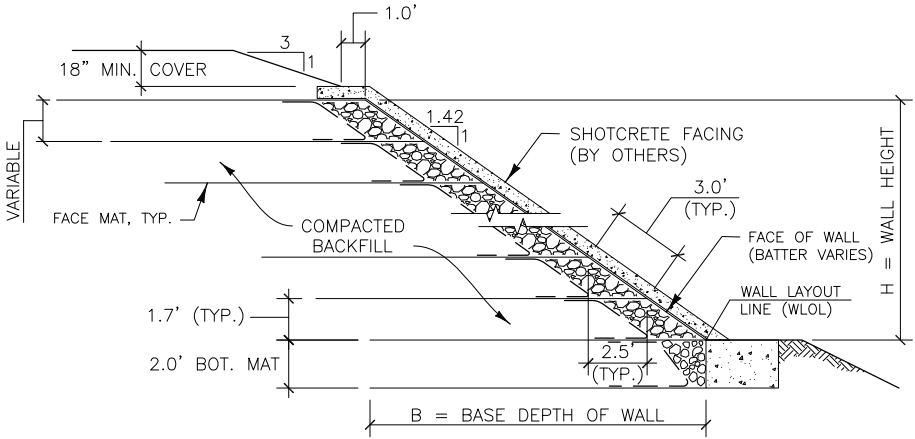




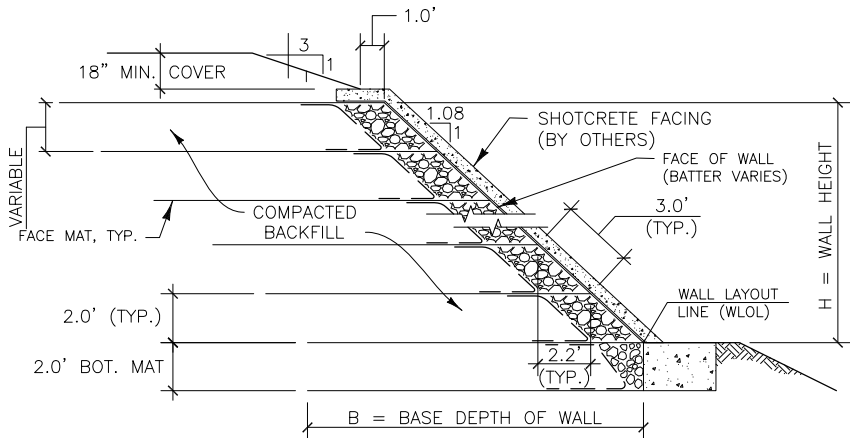
TYPICAL WALL SECTION
SCALE: 1/4" = 1'-0"
(WALL FACE SLOPE = 2.08:1)



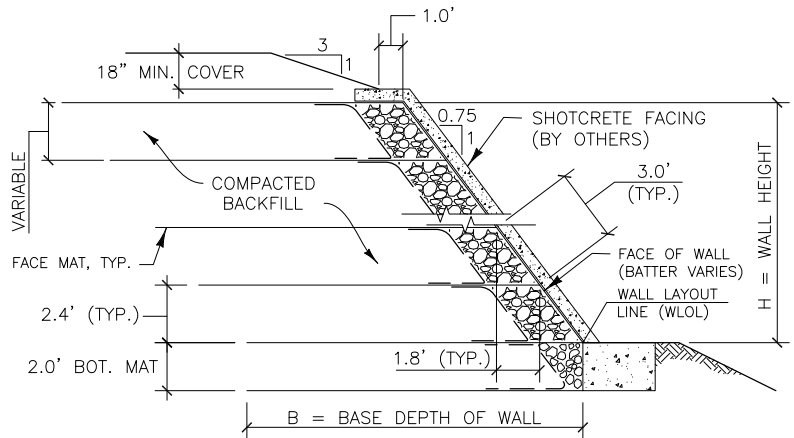
TYPICAL WALL SECTION
SCALE: 1/4" = 1'-0"
(WALL FACE SLOPE = 1.75:1)



TYPICAL WALL SECTION
SCALE: 1/4" = 1'-0"
(WALL FACE SLOPE = 1.42:1)



TYPICAL WALL SECTION
SCALE: 1/4" = 1'-0"
(WALL FACE SLOPE = 1.08:1)

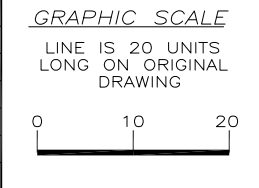


TYPICAL WALL SECTION
SCALE: 1/4" = 1'-0"
(WALL FACE SLOPE = 0.75:1)



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REV.NO.	DATE	BY	DESCRIPTION



PROJ.MGR.
ENGINEER
CADD BY HRW

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DWG DATE 7/17/19
REVISION DATE
SCALE NOTED

ENGINEERED FOR CONSTRUCTION
WELDED WIRE WALL
CLE ELUM DAM FISH PASSAGE
U.S. DEPT. OF THE INTERIOR, BUREAU OF RECLAMATION
RANCHO CORDOVA, CALIFORNIA
WALL SECTIONS

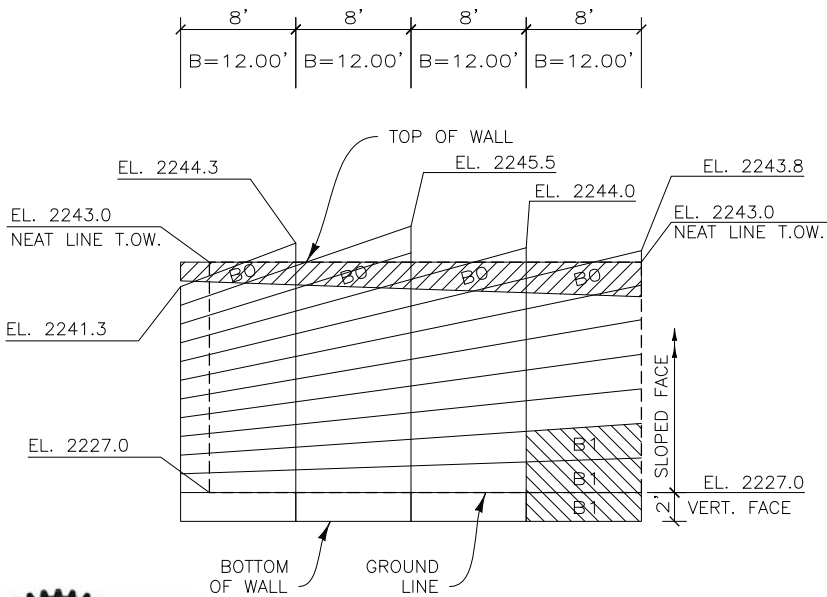
PROJECT NO. 180614BW
SHEET 2
OF 4

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180614BW-CLE ELUM DAM FISH PASSAGE

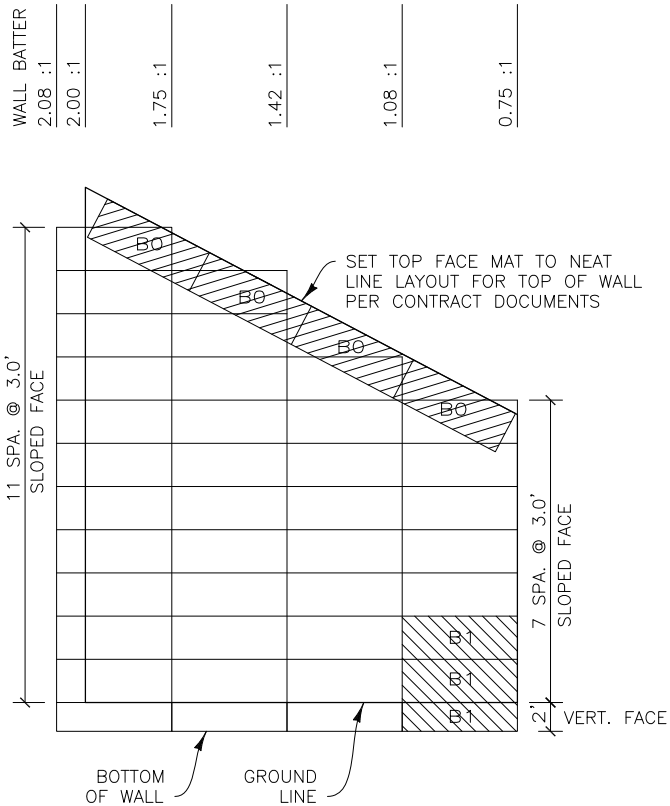


**ELEVATION VIEW
INTAKE STRUCTURE #1**

SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

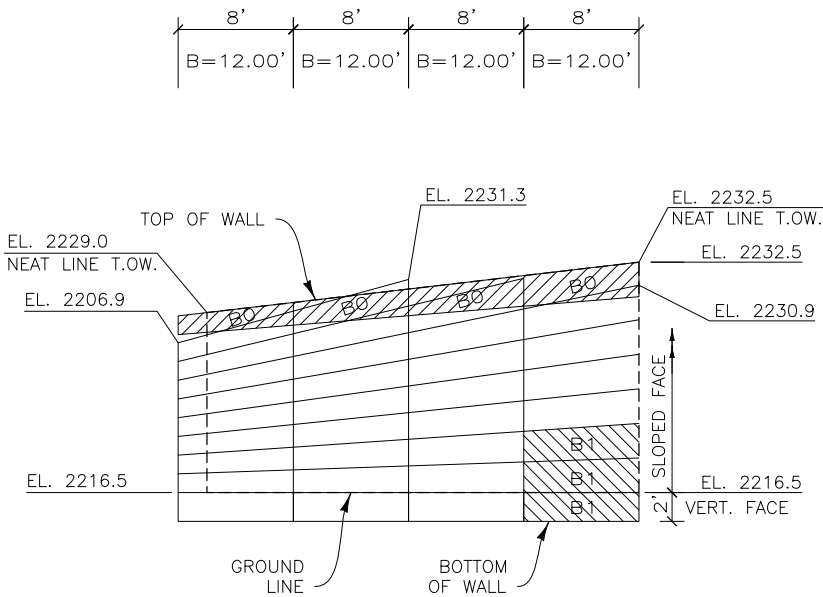


DEVELOPED WALL FACE - INTAKE STRUCTURE #1
SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

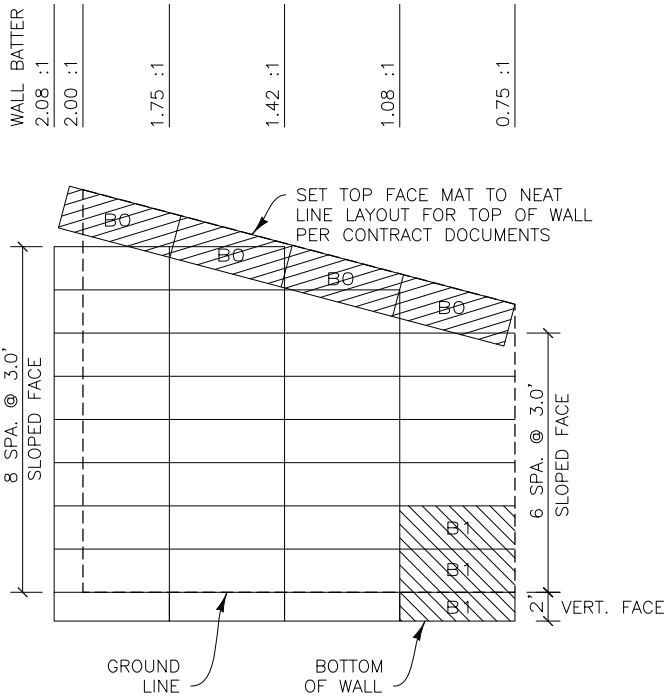


ELEVATION VIEW - INTAKE STRUCTURE #2

SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

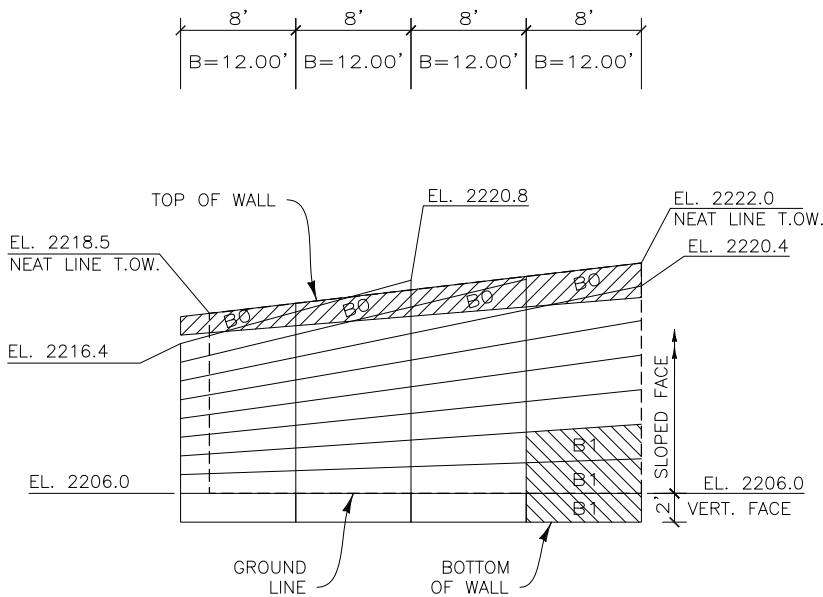


DEVELOPED WALL FACE - INTAKE STRUCTURE #2
SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

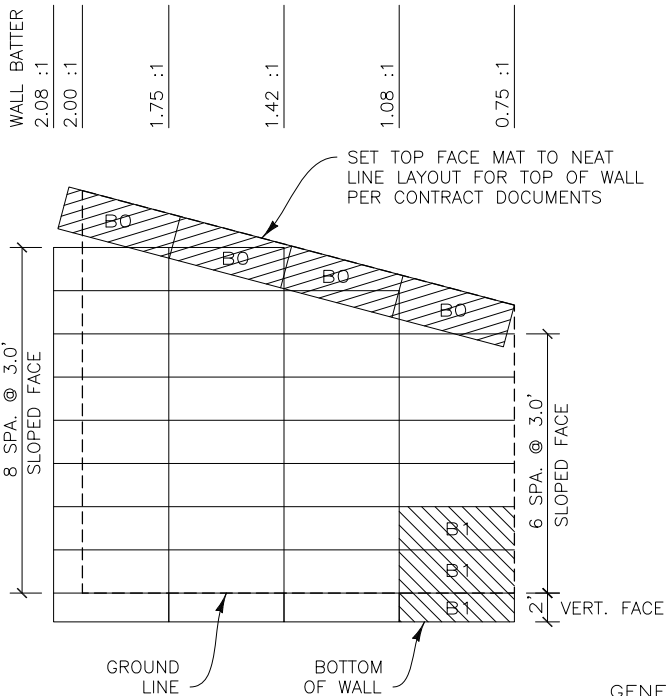


ELEVATION VIEW - INTAKE STRUCTURE #3

SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)



DEVELOPED WALL FACE - INTAKE STRUCTURE #3
SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)



ESTIMATED QUANTITIES	
INTAKE STRUCTURE	FACE AREA
#1	2,048 SQ. FT.
#2	1,712 SQ. FT.
#3	1,712 SQ. FT.
#4	1,712 SQ. FT.
#5	1,712 SQ. FT.
#6	1,695 SQ. FT.
TOTALS	10,591 SQ. FT.

-DENOTES W4.5xW3.5 WWF-8"x12" TOP FACE MAT TO MATCH NEAT LINE TOP OF WALL (T.O.W.)

-DENOTES W7.0xW3.5 WWF-8"x12" HOT-DIPPED GALVANIZED MATS

-DENOTES W4.5xW3.5 WWF-8"x12" HOT-DIPPED GALVANIZED MATS

GENERAL NOTE:
FOR ADDITIONAL INFORMATION, SEE
CONTRACT DOCUMENT SHEETS:
33-D-60061, 33-D-60750,
33-D-60754, 33-D-60063 &
33-D-60751.

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180614BW-CLE ELUM DAM FISH PASSAGE



**ELEVATION VIEW
INTAKE STRUCTURE #4**

SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

DEVELOPED WALL FACE - INTAKE STRUCTURE #4

SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

ELEVATION VIEW - INTAKE STRUCTURE #5

SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

DEVELOPED WALL FACE - INTAKE STRUCTURE #5

SCALE: 1" = 15' (LEFT WINGWALL SHOWN)
(RIGHT WINGWALL OPPOSITE HAND)

**ELEVATION VIEW
INTAKE STRUCTURE #6**

SCALE: 1" = 15' (LEFT WINGWALL)

**DEVELOPED WALL FACE
INTAKE STRUCTURE #6**

SCALE: 1" = 15' (LEFT WINGWALL)

**ELEVATION VIEW
INTAKE STRUCTURE #6**

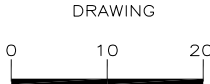
SCALE: 1" = 15' (RIGHT WINGWALL)

**DEVELOPED WALL FACE
INTAKE STRUCTURE #6**

SCALE: 1" = 15' (RIGHT WINGWALL)

GRAPHIC SCALE

LINE IS 20 UNITS
LONG ON ORIGINAL
DRAWING



PROJ.MGR.

ENGINEER

CADD BY
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SCALE
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WELDED WIRE WALL
CLE ELUM DAM FISH PASSAGE
U.S. DEPT. OF THE INTERIOR, BUREAU OF RECLAMATION
RANCHO CORDOVA, CALIFORNIA

ELEVATIONS ~ 2 OF 2

PROJECT NO.

180614BW

SHEET

4

OF 4