

GEOTECHNICAL ENGINEER

ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 028893

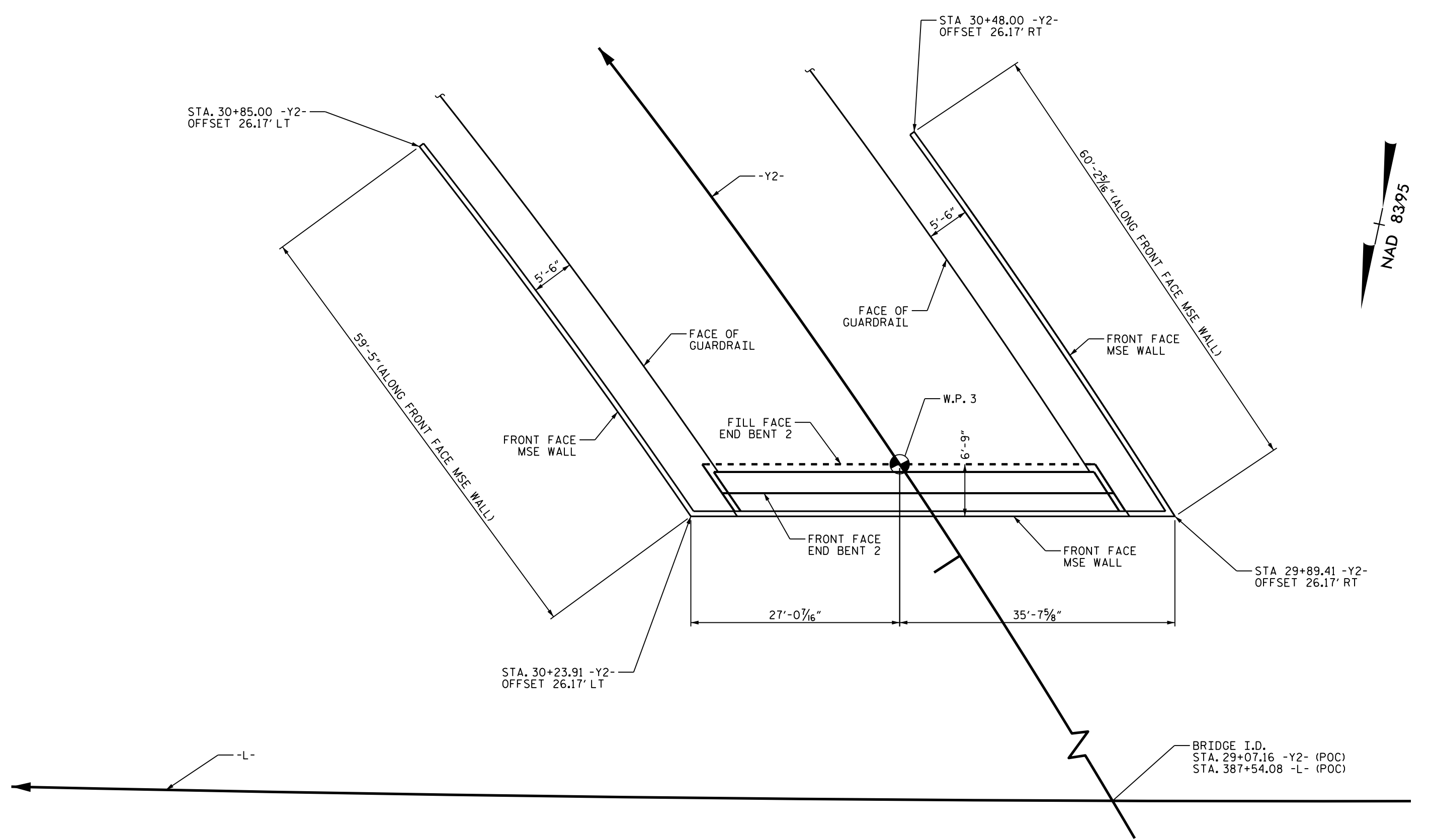
Michael H. Stephens

C4478920923140C

12/6/2016

SIGNATURE DATE SIGNATURE DATE

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**



**ESTIMATED MSE WALL QUANTITIES**  
(SQUARE FEET)

MSE RETAINING WALL NO. 1	2,640 SF
MSE RETAINING WALL NO. 2	2,930 SF
MSE RETAINING WALL NO. 3	6,700 SF
MSE RETAINING WALL NO. 4	7,305 SF
MSE RETAINING WALL NO. 5	5,510 SF
MSE RETAINING WALL NO. 6	5,440 SF

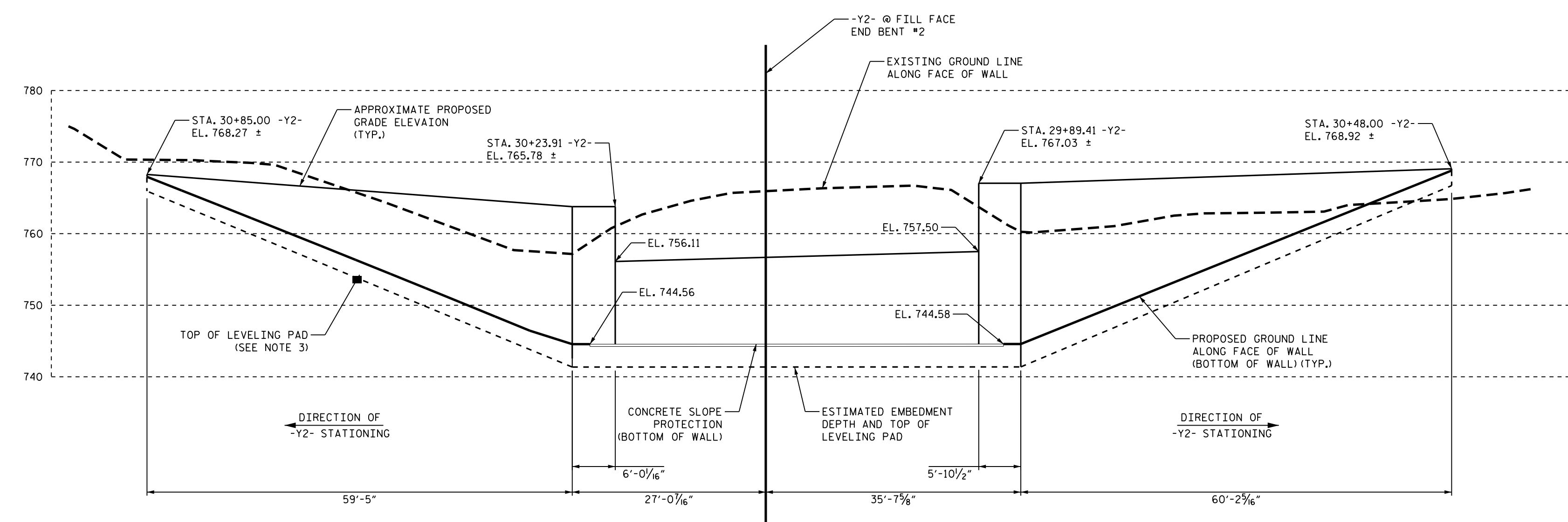
\* WALL AREA IS MEASURED USING THE DESIGN HEIGHT "H"

PLAN VIEW - MSE RETAINING WALL NO. 1

FRONT SLOPE WALL EMBEDMENT

SLOPE IN FRONT OF STRUCTURES		MINIMUM EMBEDMENT DEPTH
HORIZONTAL	FOR WALLS	H/20
	FOR ABUTMENTS	H/10
3.0H:1.0V	WALLS	H/10
2.5H:1.0V	WALLS	H/8.5
2.0H:1.0V	WALLS	H/7
1.5H:1.0V	WALLS	H/5
1.25H:1.0V	WALLS	H/4
1.0H:1.0V	WALLS	H/3

NOTE:  
 1) MAINTAIN A MINIMUM BENCH WIDTH OF 4.0 IN FRONT OF THE WALL FOR ITS ENTIRE LENGTH.  
 2) MINIMUM EMBEDMENT DEPTH OF 2 FT, UNLESS LARGER DEPTHS DICTATED BY THE ABOVE TABLE.  
 3) SUBMIT WITH THE WALL DESIGN INTERNAL, EXTERNAL, AND GLOBAL STABILITY ANALYSES.



WALL ENVELOPE - MSE RETAINING WALL NO. 1

NOTE: OFFSET DIMENSIONS ARE FROM FACE OF WALL

PROJECT NO.: 34497.1.2 (R-2707C)  
 CLEVELAND COUNTY  
 STATION: 29+07.16 -Y2-  
 SHEET 01 OF 09 387+54.08 -L-

PREPARED BY: MHS DATE: 11/17/16  
 REVIEWED BY: SY/SCC DATE: 11/17/16

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

**GEOTECHNICAL ENGINEERING UNIT**

**MSE RETAINING WALL NO. 1  
BRIDGE 468, SITE 2**

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			W-1
2			4			