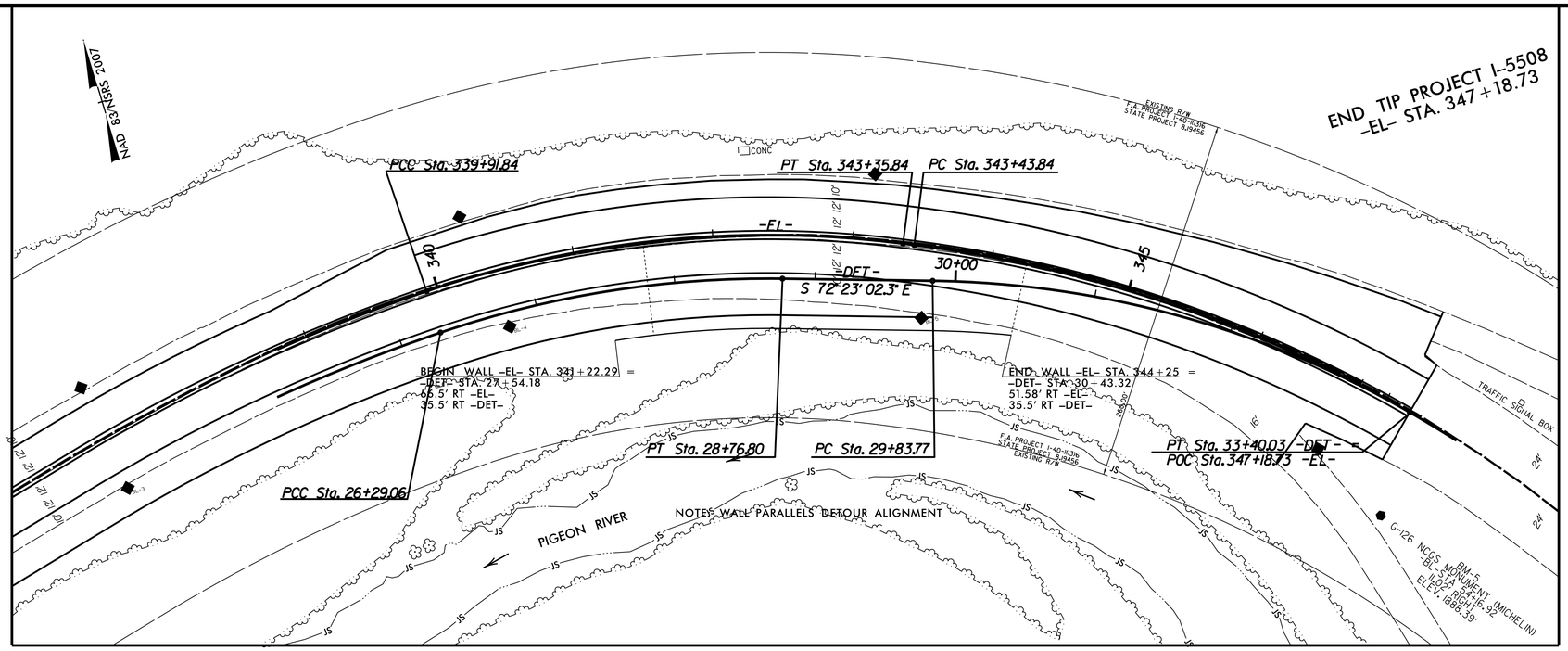
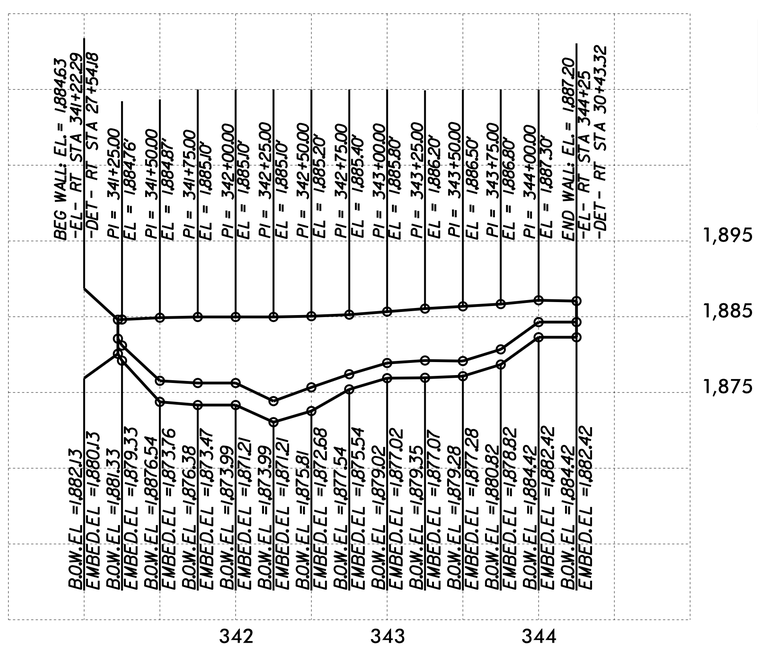



## PLAN VIEW

✱✱SEE ROADWAY PLANS FOR DETAILS AND LOCATION.




## ELEVATION VIEW -EL-

FRONT FACE

| ESTIMATED WALL QUANTITY | |
|---|---|
| RETAINING WALL | ✱ 2,907 SQUARE FEET |

✱ WALL AREA IS MEASURED USING THE DESIGN HEIGTH "H"

| GEOTECHNICAL ENGINEER | ENGINEER |
|---|---|
| NORTH CAROLINA PROFESSIONAL SEAL 028893 ENGINEER MICHAEL H. STEPHENS — Docusigned by: Michael H. Stephens C44768209239 — 9/25/2014 | |
| SIGNATURE DATE | SIGNATURE DATE |

## MINIMUM 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) MAXIMUM SLOPE OF 1H:1V WILL BE MAINTAINED ON FRONT SLOPES FOR THE ENTIRE LENGTH OF THE WALL.
4) SUBMITT WITH THE WALL DESIGN INTERNAL, EXTERNAL, AND GLOBAL STABILITY ANALYSISES.

## RETAINING WALL ELEVATIONS / HEIGHTS / EMBEDMENT

| -EL- STA | -DET- STA | OFFSET FROM ℄ (RIGHT) | ELEV @ TOP OF WALL | ✱ PROPOSED FINISHED GRADE | ELEV. AT EMBEDMENT DEPTH | ✱ EXPOSED WALL HEIGHT | MIN. WALL EMBEDMENT DEPTH | ✱✱ DESIGN WALL HEIGHT "H" |
|---|---|---|---|---|---|---|---|---|
| 341+22.29 | 27+54.18 | 35.5 -DET- | 1,884.63 | 1,882.13 | 1,880.13 | 2.50 | 2.00 | 4.5 |
| 341+25.00 | 27+56.78 | 35.5 -DET- | 1,884.76 | 1,881.33 | 1,879.33 | 3.43 | 2.00 | 5.43 |
| 341+50.00 | 27+80.75 | 35.5 -DET- | 1,884.87 | 1,876.54 | 1,873.76 | 8.33 | 2.78 | 11.11 |
| 341+75.00 | 28+04.73 | 35.5 -DET- | 1,885.10 | 1,876.38 | 1,873.47 | 8.72 | 2.91 | 11.63 |
| 342+00.00 | 28+28.71 | 35.5 -DET- | 1,885.10 | 1,876.38 | 1,873.60 | 8.72 | 2.78 | 11.50 |
| 342+25.00 | 28+52.69 | 35.5 -DET- | 1,885.10 | 1,873.99 | 1,871.21 | 11.11 | 2.78 | 13.89 |
| 342+50.00 | 28+76.74 | 35.5 -DET- | 1,885.20 | 1,875.81 | 1,872.68 | 9.39 | 3.13 | 12.52 |
| 342+75.00 | 28+99.48 | 35.5 -DET- | 1,885.40 | 1,877.54 | 1,875.54 | 7.86 | 2.00 | 9.86 |
| 343+00.00 | 29+22.35 | 35.5 -DET- | 1,885.80 | 1,879.02 | 1,877.02 | 6.78 | 2.00 | 8.78 |
| 343+25.00 | 29+45.31 | 35.5 -DET- | 1,886.20 | 1,879.35 | 1,877.07 | 6.85 | 2.28 | 9.13 |
| 343+50.00 | 29+69.17 | 35.5 -DET- | 1,886.50 | 1,879.28 | 1,877.28 | 7.22 | 2.00 | 9.22 |
| 343+75.00 | 29+93.30 | 35.5 -DET- | 1,886.80 | 1,880.82 | 1,878.82 | 5.98 | 2.00 | 7.98 |
| 344+00.00 | 30+18.28 | 35.5 -DET- | 1,887.30 | 1,884.42 | 1,882.42 | 2.88 | 2.00 | 4.88 |
| 344+25.00 | 30+43.32 | 35.5 -DET- | 1,887.20 | 1,884.42 | 1,882.42 | 2.78 | 2.00 | 4.78 |

✱ ELEVATION @ PROPOSED FINISHED GRADE AND EXPOSED WALL HEIGHT DO NOT INCLUDE EMBEDMENT DEPTH

✱✱ FOR DESIGN WALL HEIGHT "H" AND ADDITIONAL CONSTRUCTION DETAILS, SEE SHEET 2 OF 2

***PROJECT NO.:*** 55057.1.1 (I-5508)

HAYWOOD ***COUNTY***

***STATION:*** -EL- 341+22.29 TO -EL- 344+25

SHEET 01 OF 03

| PREPARED BY: MHS | DATE: 09/25/14 |
|---|---|
| REVIEWED BY: SCC | DATE: 09/25/14 |

***GEOTECHNICAL ENGINEERING UNIT***

☐ *EASTERN REGIONAL OFFICE*
☒ *WESTERN REGIONAL OFFICE*
☐ *CONTRACT OFFICE*

***STATE OF NORTH CAROLINA***
***DEPARTMENT OF TRANSPORTATION***
***RALEIGH***

MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALL

| REVISIONS | | | | | | SHEET NO. |
|---|---|---|---|---|---|---|
| NO. | BY | DATE | NO. | BY | DATE | W1 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 3 |