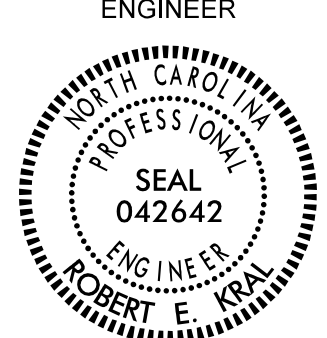
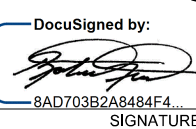
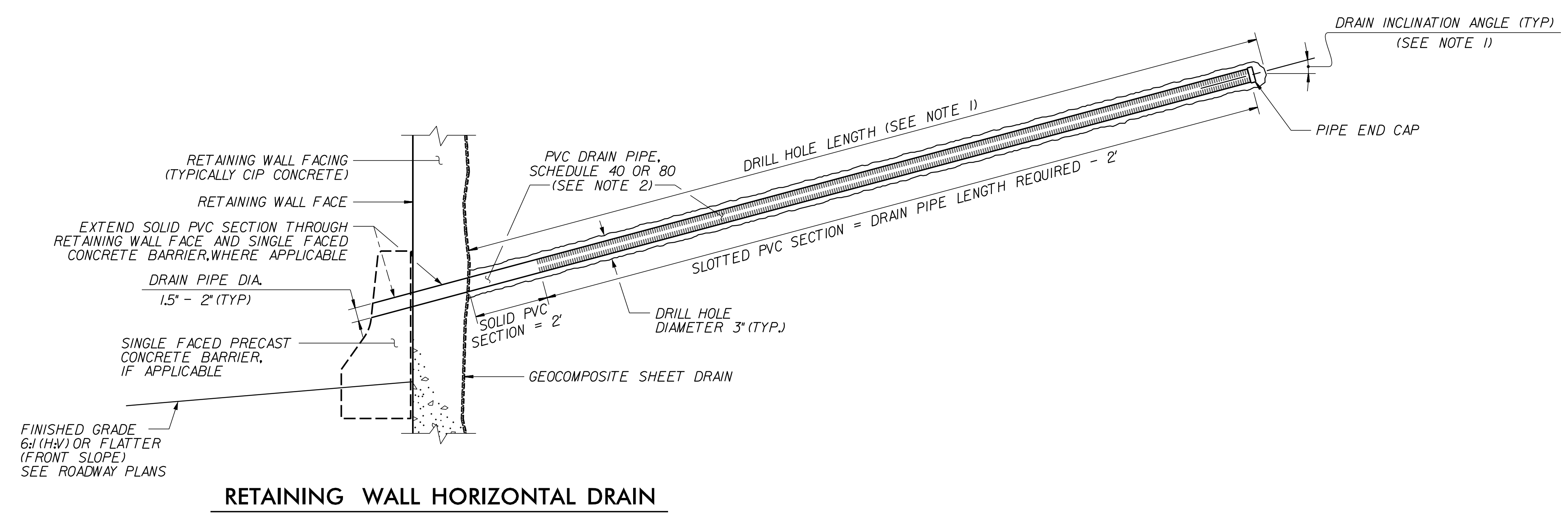
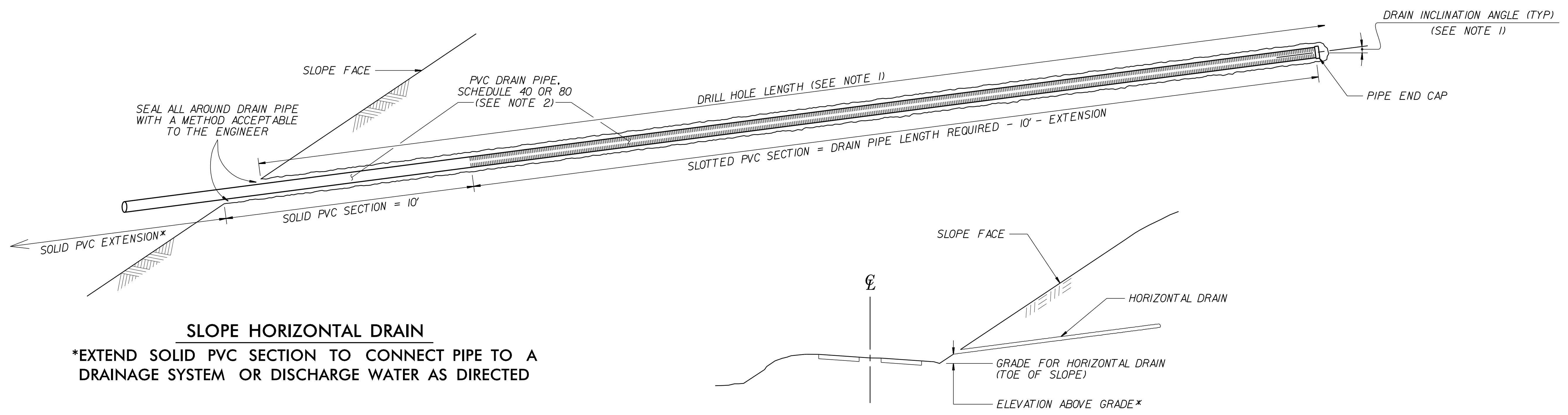


| | |
|--|--|
| GEOTECHNICAL ENGINEER  SEAL 042642 ROBERT E. KRAL | ENGINEER _____ SIGNATURE |
| DocuSigned by:  SIGNATURE | 08/01/2022 DATE |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |



RETAINING WALL HORIZONTAL DRAIN



SLOPE HORIZONTAL DRAIN

*EXTEND SOLID PVC SECTION TO CONNECT PIPE TO A DRAINAGE SYSTEM OR DISCHARGE WATER AS DIRECTED

EXAMPLE CROSS-SECTION WITH SLOPE HORIZONTAL DRAIN
*SEE NOTE 1 FOR DRAIN ELEVATIONS ABOVE (OR BELOW) GRADE

NOTES:

1. SEE ROADWAY SUMMARY SHEETS FOR APPROXIMATE KNOWN HORIZONTAL DRAIN LOCATIONS, ELEVATIONS, INCLINATION AND LENGTHS. ADDITIONAL DRAINS MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.
2. DRAIN PIPES MAY BE OMITTED FOR SOME HORIZONTAL DRAINS. SEE ROADWAY SUMMARY SHEETS FOR DRAIN PIPE REQUIREMENTS INCLUDING THOSE DRAINS WITHOUT PIPES.
3. FOR HORIZONTAL DRAINS, SEE HORIZONTAL DRAINS SPECIAL PROVISION (GT-6).

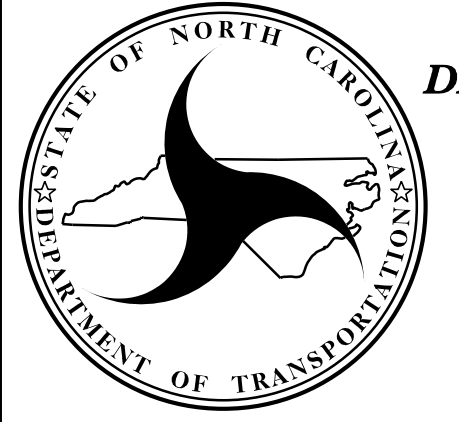
PROJECT NO.: A-0009CC
 GRAHAM COUNTY
 RETAINING WALL #21: -L- 420+39, 42' LT TO 436+65, 45' LT
 SHEET 5 OF 5

| | |
|------------------------|----------------|
| PREPARED BY: R. KRAL | DATE: 8/1/2022 |
| REVIEWED BY: M. BREWER | DATE: 8/1/2022 |

Prepared in the Office of:



**CAROLINUS
GEOTECHNICAL
GROUP**
 2400 CROWNPOINT EXECUTIVE DRIVE
 SUITE 800
 CHARLOTTE, NC 28227
 (980) 339-8684



**NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**GEOTECHNICAL
ENGINEERING UNIT**

| REVISIONS | | | | | | SHEET NO. |
|-----------|----|------|-----|----|------|-----------|
| NO. | BY | DATE | NO. | BY | DATE | |
| 1 | | | 3 | | | W21-5 |
| 2 | | | 4 | | | |